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NEW ZEALAND
Official Year-Book,
1897.

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THE

NEW ZEALAND

OFFICIAL YEAR-BOOK

1897

PREPARED UNDER INSTRUCTIONS FROM THE

RIGHT HONOURABLE R. J. SEDDON, P.C.

PREMIER.

135020

BY

E. J. VON DADELSZEN,

REGISTRAR-GENERAL.

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1897

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PREFACE.

THE New Zealand Official Year-book for 1897 will be found to contain fuller and more complete statistical information than any of its predecessors.

The portion relating to statistics covers 271 pages, against 63 pages devoted to the same purpose in the original "Hand-book" for 1892; so that, considered as a work of reference, the book now issued should be decidedly the more valuable of the two.

Requests have been received from time to time for more particulars on trade, manufactures, and other subjects dealt with statistically, which are being met as fast as possible. The elaboration of Part II., which is now divided into thirteen sections, necessarily curtails the space available for articles on special subjects; and this cannot be avoided so long as the book is made to serve a double purpose.

The printing has proceeded most satisfactorily this year, and I am glad to acknowledge the help rendered by the authorities of the Government Printing Office, which has resulted in the work being finished in time for presentation to Parliament, and for distribution in England before December next.

The diagrams and pictures were prepared in the Department of the Surveyor-General, and will doubtless be appreciated as much as those previously given and which have been most favourably noticed.

This is the sixth year of issue; the demand is still increasing, and besides the sale there is a considerable further circulation of copies issued free of charge by Government, in the interests of the colony.

E. J. VON DADELSZEN.

Registrar-General's Office,
Wellington, 9th September, 1897.

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ADDENDA AND ERRATA.

GOVERNOR OF NEW ZEALAND (See page 27).

RANFURLY, His Excellency The Right Honourable Uchter John Mark, fifth Earl of (Ireland, 1831), Viscount Northland (1791), Baron Welles (1781), Lord-in-Waiting to Her Majesty (1895–1897), Knight Commander of the Most Distinguished Order of Saint Michael and Saint George; Knight of Justice and Member of the Council of the Order of St. John of Jerusalem; son of third earl, brother of fourth earl; born 14th August, 1856; succeeded, 1875; married, 1880, The Honourable Constance Elizabeth, only child of seventh Viscount Charlemont, C.B. Living issue: One son (Viscount Northland), two daughters (Ladies Constance and Eileen Knox). Appointed 6th April, 1897, and assumed office, 10th August, 1897, as Governor and Commander-in-Chief in and over Her Majesty's Colony of New Zealand and its Dependencies. Salary, £5,000. Residences: Northland House, Dungannon, Ireland; Government House, Wellington; Government House, Auckland.

Private Secretary and Aide-de-Camp: Dudley Alexander (Captain, "The Prince of Wales' Own"—West Yorkshire—Regiment).

Assistant Private Secretary: The Honourable Charles Edward Hill-Trevor.

Aide-de-Camp: Henry Dudley Ossulston Ward (Lieutenant, Royal Horse Artillery).

ADMINISTRATOR OF THE GOVERNMENT.—A dormant commission empowers the Chief Justice of the Colony for the time being to administer the Government in case of the death, incapacity, removal, or departure of the Governor.

CONSULS (See p. 23): E. C. Skog, Acting-Consul for Belgium at Christchurch, *vice* A. Beck.

HONOURS HELD BY COLONISTS (See p. 26): Seddon, Rt. Hon. Richard John, P.C.

ROLL OF MEMBERS OF THE LEGISLATIVE COUNCIL (See p. 29): Hon. Major Ropata Wahawaha, N.Z.C., died 1st July, 1897.

ROLL OF MEMBERS OF HOUSE OF REPRESENTATIVES (See p. 31): Hon. J. G. Ward, resigned 14th July, 1897; re-elected 13th August, 1897.

NEW ZEALAND NEWSPAPERS (See p. 79): *Waikato Times and Thames Valley Gazette* (M.), *for* Tu., Th., Sat., *read* Daily.

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NEW ZEALAND OFFICIAL YEAR-BOOK, 1897.

PART I.—INTRODUCTORY; OFFICIAL.

NEW ZEALAND.

THE Colony of New Zealand consists of three main islands, with several groups of smaller islands lying at some distance from the principal group. The main islands, known as the North, the Middle, and Stewart Islands, have a coast-line 4,330 miles in length—North Island, 2,200 miles; Middle Island, 2,000 miles; and Stewart Island, 130 miles. The other islands now included within the colony are the Chatham, Auckland, Campbell, Antipodes, Bounty, and Kermadec Islands. A protectorate over the Cook Islands (Hervey Group) is exercised by the Imperial Government, the Governor of New Zealand acting as responsible adviser.

New Zealand is mountainous in many parts, but has, nevertheless, large plains in both North and Middle Islands. In the North Island, which is highly volcanic, is situated the famous Thermal-Springs District, of which a special account will be given. The Middle Island is remarkable for its lofty mountains, with their magnificent glaciers, and for the deep sounds or fiords on the western coast.

New Zealand is firstly a pastoral, and secondly an agricultural country. Sown grasses are grown almost everywhere, the extent of land laid down being upwards of nine millions of acres. The soil is admirably adapted for receiving these grasses, and, after the bush has been burnt off, is mostly sown over without previous ploughing. In the Middle Island a large area is covered with native grasses, all used for grazing purposes. The large extent of good grazing-land has made the colony a great wool and meat-producing country; and its agricultural capabilities are, speaking generally, very considerable. The abundance of water and the quantity of valuable timber are other natural advantages.

New Zealand is, besides, a mining country. Large deposits of coal are met with, chiefly on the west coast of the Middle Island. Gold, alluvial and in quartz, is found in both islands, the yield having been over fifty-two millions sterling in value to the present time. Full statistical information on this subject is given further on, compiled up to the latest dates.

Discovery and Early Settlement.

The first authentic account of the discovery of New Zealand is that given by Abel Jansen Tasman, the Dutch navigator. He left Batavia on the 14th August, 1642, in the yacht "Heemskirk," accompanied by the "Zeehaen" (or "Sea-hen") fly-boat. After having visited Mauritius and discovered Tasmania, named by him "Van Diemen's Land," in honour of Anthony van Diemen, Governor of the Dutch possessions in the East Indies, he steered eastward, and on the 13th December of the same year sighted the west coast of the Middle Island of New Zealand, described by him as "a high mountainous country, which is at present marked in the charts as New Zealand."

Tasman, under the belief that the land he saw belonged to a great polar continent, and was part of the country discovered some years before by Schouten and Le Maire, to which the name of Staaten Land had been given, gave the same name of Staaten Land to New Zealand; but within about three months afterwards Schouten's "Staaten Land" was found to be merely an inconsiderable island. Upon this discovery being announced, the country that Tasman had called Staaten Land received again the name of "New Zealand," by which it has ever since been known. Tasman sailed along the coast to a bay, where he anchored. To this he gave the name of Murderers (now Massacre) Bay, on account of an unprovoked attack on a boat's crew by the natives, and the massacre of four white men. Thence he steered along the west coast of the North Island, and gave the name of Cape Maria van Diemen to the north-western extremity thereof. After sighting the islands of the Three Kings he finally departed, not having set foot in the country.

There is no record of any visit to New Zealand after Tasman's departure until the time of Captain Cook, who, after leaving the Society Islands, sailed in search of a southern continent then believed to exist. He sighted land on the 6th October, 1769, at Young Nick's Head, and on the 8th of that month cast anchor in Poverty Bay. After having coasted round the North Island and the Middle and Stewart Islands—which last he mistook for part of the Middle Island—he took his departure from Cape Farewell on the 31st March, 1770, for Australia. He visited New Zealand again in 1773, in 1774, and in 1777.

M. de Surville, a French officer in command of the vessel "Saint Jean Baptiste," while on a voyage of discovery, sighted the north-east coast of New Zealand on the 12th December, 1769, and re-

mained for a short time. A visit was soon after paid by another French officer, M. Marion du Fresne, who arrived on the west coast of the North Island of New Zealand on the 24th March, 1772, but was, on the 12th June following, treacherously murdered at the Bay of Islands by the Natives.

In 1793 the "Dædalus," under the command of Lieutenant Hanson, was sent by the Government of New South Wales to New Zealand, and two chiefs were taken thence to Norfolk Island. There was after this an occasional intercourse between the islands of New Zealand and the English settlements in New South Wales.

In 1814 the first missionaries arrived in New Zealand—Messrs. Hall and Kendall—who had been sent as forerunners by Mr. Marsden, chaplain to the New South Wales Government. After a short stay they returned to New South Wales, and on the 19th November of that year again embarked in company with Mr. Marsden, who preached his first sermon in New Zealand on Christmas Day, 1814. He returned to Sydney on the 23rd March, 1815, leaving Messrs. Hall and Kendall, who formed the first mission station at Rangihoua, Bay of Islands, under the auspices of the Church Missionary Society. Six years later, in 1821, the work of evangelization was put on a more durable basis; but the first station of the Wesleyan mission, established by Mr. Leigh and his wife, at the valley of the Kaeo, Whangaroa, was not taken possession of until the 10th June, 1823.

Colonisation.

The first attempt at colonisation was made in 1825 by a company formed in London. An expedition was sent out under the command of Captain Herd, who bought two islands in the Hauraki Gulf and a strip of land at Hokianga. The attempt, however, was a failure, owing to the savage character of the inhabitants. In consequence of frequent visits of whaling-vessels to the Bay of Islands, a settlement grew up at Kororareka—now called Russell—and in 1833 Mr. Busby was appointed British Resident there. A number of Europeans—generally men of low character—gradually settled in different parts of the country, and married Native women.

In 1838 a colonisation company, known as the New Zealand Company, was formed to establish settlement on systematic principles. A preliminary expedition, under the command of Colonel William Wakefield, was despatched from England on the 12th May, 1839, and arrived in New Zealand in the following August. Having purchased land from the Natives, Colonel Wakefield selected the shore of Port Nicholson, in Cook Strait, as the site of the first settlement. On the 22nd January, 1840, the first body of immigrants arrived, and founded the town of Wellington. About the same time —namely, on the 29th January, 1840—Captain Hobson, R.N., arrived at the Bay of Islands, empowered, with the consent of the

Natives, to proclaim the sovereignty of the Queen over the islands of New Zealand, and to assume the government thereof. A compact called "The Treaty of Waitangi," to which in less than six months five hundred and twelve names were affixed, was entered into, whereby all rights and powers of sovereignty were ceded to the Queen, all territorial rights being secured to the chiefs and their tribes. New Zealand was then constituted a dependency of the Colony of New South Wales, but on the 3rd May, 1841, was proclaimed a separate colony. The seat of Government had been previously established at Waitemata (Auckland), round which a settlement was formed.

The New Zealand Company having decided to form another settlement, to which the name of "Nelson" was to be given, despatched a preliminary expedition from England in April, 1841, for the purpose of selecting a site. The spot chosen was the head of Blind Bay, where a settlement was established. About the same time a number of pioneers arrived in Taranaki, despatched thither by the New Plymouth Company, a colonising society which had been formed in England, and had bought 50,000 acres of land from the New Zealand Company.

The next important event in the progress of colonisation was the arrival at Port Chalmers, in March, 1848, of two emigrant ships sent out by the Otago Association for the foundation of a settlement by persons belonging to or in sympathy with the Free Church of Scotland.

In 1849 the "Canterbury Association for founding a Settlement in New Zealand" was incorporated. On the 16th December, 1850, the first emigrant ship despatched by the association arrived at Port Cooper, and the work of opening up the adjoining country was set about in a systematic fashion, the intention of the promoters being to establish a settlement complete in itself, and composed entirely of members of the then United Church of England and Ireland.

The Maoris.

Prior to the colonisation of New Zealand by Europeans, the earliest navigators and explorers found a race of people already inhabiting both islands. Papers written in 1874 by Mr. (afterwards Sir) William Fox, and Sir Donald McLean, then Native Minister, state that at what time the discovery of these islands was made by the Maoris, or from what place they came, are matters of tradition only, and that much has been lost in the obscurity enveloping the history of a people without letters. Nor is there anything on record respecting the origin of the Maori people themselves, beyond the general tradition of the Polynesian race, which seems to show a series of successive migrations from west to east, probably by way of Malaysia to the Pacific. Little more can now be gathered from their traditions than that they were immigrants, and that they probably found inhabitants on the east coast of the

North Island belonging to the same race as themselves—the descendants of a prior migration, whose history is lost. The tradition runs that, generations ago, the Maoris dwelt in a country named Hawaiki, and that one of their chiefs, after a long voyage, fetched the northern island of New Zealand. Returning to his home with a flattering description of the country he had discovered, this chief, it is said, persuaded a number of his kinsfolk and friends, who were much harassed by war, to set out with a fleet of double canoes for the new land. The names of most of the canoes are still remembered, and each tribe agrees in its account of the doings of the people of the principal canoes after their arrival in New Zealand; and from these traditional accounts the descent of the numerous tribes has been traced. Calculations, based on the genealogical staves kept by the *tohungas*, or priests, and on the well-authenticated traditions of the people, indicate that about twenty-one generations have passed since the migration, which may therefore be assumed to have taken place about five hundred and twenty-five years ago. The position of the legendary Hawaiki is unknown, but many places in the South Seas have been thus named in memory of the motherland. The Maoris speak a very pure dialect of the Polynesian language, the common tongue, with more or less variation, in all the Eastern Pacific Islands. When Captain Cook first visited New Zealand he availed himself of the services of a native from Tahiti, whose speech was easily understood by the Maoris. In this way much information respecting the early history of the country and its inhabitants was obtained which could not have otherwise been had.

Boundaries and Area.

The Proclamation of Captain Hobson on the 30th January, 1840, gave as the boundaries of the colony the following degrees of latitude and longitude: On the north, 34° 30′ S. lat.; on the south, 47° 10′ S. lat.; on the east, 179° 0′ E. long.; on the west, 166° 5′ E. long. These limits excluded small portions of the extreme north of the North Island and of the extreme south of Stewart Island.

In April, 1842, by Royal Letters Patent, and again by the Imperial Act 26 and 27 Vict., c. 23 (1863), the boundaries of the colony were altered so as to extend from 33° to 53° of south latitude and from 162° of east longitude to 173° of west longitude. By Proclamation bearing date the 21st July, 1887, the Kermadec Islands, lying between the 29th and 32nd degrees of south latitude and the 177th and 180th degrees of west longitude, were declared to be annexed to and to become part of the Colony of New Zealand.

The following now constitute the Colony of New Zealand:—

1. The island commonly known as the North Island, with its adjacent islets, having an aggregate area of 44,468 square miles, or 28,459,580 acres.

2. The island known as the Middle Island, with adjacent islets, having an aggregate area of 58,525 square miles, or 37,456,080 acres.

3. Stewart Island, and adjacent islets, having an area of 665 square miles, or 425,390 acres.

4. The Chatham Islands, situate 536 miles eastward of Lyttelton in the Middle Island, with an area of 375 square miles, or 239,920 acres.

5. The Auckland Islands, about 200 miles south of Stewart Island, extending about 30 miles from north to south, and nearly 15 from east to west, the area being 210,650 acres.

6. The Campbell Islands, in latitude 52° 33′ south, and longitude 169° 8′ west, about 30 miles in circumference, with an area of 45,440 acres.

7. The Antipodes Islands, about 458 miles in a south-easterly direction from Port Chalmers, in the Middle Island. These are detached rocky islands, and extend over a distance of between 4 and 5 miles from north to south. Area, 12,960 acres.

8. The Bounty Islands, a small group of islets, thirteen in number, lying north of the Antipodes Islands, and about 415 miles in an east-south-easterly direction from Port Chalmers. Area, 3,300 acres.

9. The Kermadec Islands, a group lying about 614 miles to the north-east of Russell, in the Bay of Islands. Raoul or Sunday Island, the largest of these, is about 20 miles in circuit. The next in size is Macaulay Island, about 3 miles round. Area of the group, 8,208 acres.

The total area of the colony is thus about 104,471 square miles, of which the aggregate area of the outlying groups of islands that are practically useless for settlement amounts to about 438 square miles.

A protectorate is exercised by the Imperial Government over the Cook Islands (or Hervey Group) by Proclamation dated the 27th October, 1888. The British Resident* is appointed on the recommendation of the New Zealand Government. He acts as Government Agent for the colony in all matters of trade.

Area of the Australian Colonies.

The areas of the several Australian Colonies, as given by different authorities, vary considerably. The total area of the Australian Continent is given as 2,944,628 square miles, according to a computation made by the late Surveyor-General of Victoria, Mr. J. A. Skene, from a map of Continental Australia compiled and engraved under his direction; but the following areas are taken from the latest official records of each colony:—

* Frederick J. Moss, Esq., late M.H.R., is now British Resident. His salary is paid by this colony.

	Square Miles
Queensland	668,497
New South Wales	310,700
Victoria	87,884
South Australia	903,690
Western Australia	975,920
Total Continent of Australia	2,946,691
Tasmania	26,215
New Zealand (including the Chatham and other islands)	104,471
Total Australasia	3,077,377

The size of these colonies may be better realised by comparison of their areas with those of European countries. The areas of the following countries — Austria-Hungary, Germany, France, Belgium, Holland, Denmark, Sweden and Norway, Portugal, Spain, Italy (including Sardinia and Sicily), Switzerland, Greece, Roumania, Bulgaria, Servia, Eastern Roumelia, and Turkey in Europe—containing on the whole rather less than 1,600,000 square miles, amount to little more than half the extent of the Australian Continent. If the area of Russia in Europe be added to those of the other countries the total would be about one-seventh larger than the Australian Continent, and about one-twelfth larger than the Australasian Colonies, including New Zealand.

Area of the Colony of New Zealand.

The area of the Colony of New Zealand is about one-seventh less than the area of Great Britain and Ireland, the Middle Island of New Zealand being a little larger than the combined areas of England and Wales.

United Kingdom.	Area in Square Miles.
England and Wales	58,311
Scotland	30,463
Ireland	32,531
Total	121,305

New Zealand.	Area in Square Miles.
North Island	44,468
Middle Island	58,525
Stewart Island	665
Chatham Islands	375
Other islands	438
Total	104,471

Physical Features of the North Island.

The North Island extends over a little more than seven degrees of latitude—a distance in a direct line from north to south of 430 geographical or 498 statute miles; but, as the northern portion of the colony, which covers more than three degrees of latitude,

trends to the westward, the distance in a straight line from the North Cape to Cape Palliser, the extreme northerly and southerly points of the island, is about 515 statute miles.

This island is, as a whole, hilly, and, in parts, mountainous in character, but there are large areas of plain or comparatively level country that are, or by clearing may be made, available for agricultural purposes. Of these, the principal are the plains in Hawke's Bay on the East Coast, the Wairarapa Plain in the Wellington District, and a strip of country along the West Coast, about 250 miles in length, extending from a point about thirty miles from the City of Wellington to a little north of New Plymouth. The largest plain in the North Island, Kaingaroa, extends from the shore of Lake Taupo in a north-north-easterly direction to the sea-coast in the Bay of Plenty; but a great part of it is covered with pumice-sand, and is unfitted for tillage or pasture. There are several smaller plains and numerous valleys suitable for agriculture. The level or undulating country in this island fit, or capable of being made fit, for agriculture has been roughly estimated at 13,000,000 acres. This includes lands now covered with standing forest, and swamps that can be drained; also large areas of clay-marl and pumice-covered land. The clay-marl in its natural state is cold and uninviting to the farmer, but under proper drainage and cultivation it can be brought to a high state of productiveness. This kind of land is generally neglected at the present time, as settlers prefer soils more rapidly remunerative and less costly to work. The larger portion of the North Island was originally covered with forest. Although the area of bush-land is still very great, yet year by year the amount is being reduced, chiefly to meet the requirements of settlement, the trees being cut down and burnt, and grass-seed sown on the ashes to create pasture. Hilly as the country is, yet from the nature of the climate it is especially suited for the growth of English grasses, which will flourish wherever there is any soil, however steep the land may be; once laid down in grass very little of the land is too poor to supply food for cattle and sheep. The area of land in the North Island deemed purely pastoral or capable of being made so, while too steep for agricultural purposes, is estimated at 14,200,000 acres. In the centre of the island is a lake, about twenty miles across either way, called Taupo. A large area adjacent to the lake is at present worthless pumice-country. The Waikato River, the largest in the North Island, flows out of its north-eastern corner, and runs thence north-westward until it flows into the ocean a little distance south of the Manukau Harbour. This river is navigable for small steamers for about a hundred miles from its mouth. The Maori King-country, occupied by Natives who for several years isolated themselves from Europeans, lies between Lake Taupo and the western coast. The River Thames, or Waihou, having its sources north of Lake Taupo, flows northward into the Firth of Thames. It is navigable for about fifty miles, but only for small steamers. The other navigable

rivers in this island are the Wanganui and Manawatu, which flow towards the south-west into Cook Strait.

The mountains in the North Island are estimated to occupy about one-tenth of the surface, and do not exceed 4,000ft. in height, with the exception of a few volcanic mountains that are more lofty. Of these, the three following are the most important:—

1. The Tongariro Mountain, situated to the southward of Lake Taupo. It consists of a group of distinct volcanic cones, the lava-streams from which have so overlapped in their descent as to form one compact mountain-mass at the base. The highest of these cones is called Ngauruhoe, and attains an elevation of 7,515ft. The craters of Ngauruhoe, the Red Crater (6,140ft.), and Te Mari (4,990ft.) are the three vents from which the latest discharges of lava have taken place, the most recent having occurred in 1868. These craters are still active, steam and vapour issuing from them with considerable force and noise, the vapours, charged with pungent gases and acids, making it dangerous to approach too near the crater-lips.

2. Ruapehu. This mountain lies to the south of Ngauruhoe and Tongariro. It is a volcanic cone in the solfatara stage, and reaches the height of 9,008ft., being in part considerably above the line of perpetual snow. The most remarkable feature of this mountain is the crater-lake on its summit, which is subject to slight and intermittent eruptions, giving rise to vast quantities of steam. Recently —in March, 1895—such an eruption took place, forming a few hot springs on the margin of the lake, and increasing the heat in the lake itself. This lake lies at the bottom of a funnel-shaped crater, the steep sides of which are mantled with ice and snow. The water occupies a circular basin about 500ft. in diameter, some 300ft. below the enclosing peaks, and is quite inaccessible except by ropes. This lake, and the three craters previously mentioned on Tongariro, are all in one straight line, which, if produced, would pass through the boiling springs at Tokaanu on the southern margin of Lake Taupo, the volcanic country north-east of that lake, and White Island, an active volcano in the Bay of Plenty, situated about twenty-seven miles from the mainland.

3. Mount Egmont. This is an extinct volcanic cone, rising to a height of 8,260ft. The upper part is always covered with snow. This mountain is situated close to New Plymouth, and is surrounded by one of the most fertile districts in New Zealand. Rising from the plains in solitary grandeur, it is an object of extreme beauty, the cone being one of the most perfect in the world.

It is estimated that the area of mountain-tops and barren country at too high an altitude for sheep, and therefore worthless for pastoral purposes, amounts, in the North Island, to 300,000 acres.

Without a doubt the hot springs form the most remarkable feature of the North Island. They are found over a large area, extending from Tongariro, south of Lake Taupo, to Ohaeawai, in the extreme north—a distance of some 300 miles; but the principal seat

of hydrothermal action appears to be in the neighbourhood of Lake Rotorua, about forty miles north-north-east from Lake Taupo. By the destruction of the famed Pink and White Terraces and of Lake Rotomahana during the eruption of Mount Tarawera on the 10th June, 1886, the neighbourhood has been deprived of attractions unique in character and of unrivalled beauty; but the natural features of the country—the numerous lakes, geysers, and hot springs, some of which possess remarkable curative properties in certain complaints—are still very attractive to tourists and invalids. The world-wide importance of conserving this region as a sanatorium for all time has been recognised by the Government, and it is now dedicated by Act of Parliament to that purpose.

Notwithstanding the length of coast-line, good harbours in the North Island are not numerous. Those on the west coast north of New Plymouth are bar-harbours, unsuitable for large vessels. The principal harbours are the Waitemata Harbour, on which Auckland is situated—this is rather a deep estuary than a harbour; several excellent havens in the northern peninsula; and Port Nicholson, on the borders of which Wellington is situated. This is a land-locked harbour, about six miles across, having a comparatively narrow but deep entrance from the ocean. The water is deep nearly throughout.

Cook Strait.

Cook Strait separates the North and Middle Islands. It is some sixteen miles across at its narrowest part, but in the widest about ninety. The strait is invaluable for the purpose of traffic between different parts of the colony.

Physical Features of the Middle Island.

The extreme length of the Middle Island, from Jackson's Head, in Cook Strait, to Puysegur Point, at the extreme south-west, is about 525 statute miles; the greatest distance across at any point is in Otago (the southernmost) District, about 180 miles.

The Middle Island is intersected along almost its entire length by a range of mountains known as the Southern Alps. Some of the summits reach a height of from 10,000ft. to 12,000ft., Mount Cook, the highest peak, rising to 12,349ft.

In the south, in the neighbourhood of the sounds and Lake Te Anau, there are many magnificent peaks, which, though not of great height, are, owing to their latitude, nearly all crowned with perpetual ice and snow. Further north the mountains increase in height—Mount Earnslaw, at Lake Wakatipu; and Mount Aspiring, which has been aptly termed the New Zealand Matterhorn, nearly 10,000ft. in height, at Lake Wanaka. Northward of this again are Mount Cook (or Aorangi), Mount Sefton, and other magnificent peaks.

For beauty and grandeur of scenery the Southern Alps of New Zealand may worthily compare with, while in point of variety they are

said actually to surpass, the Alps of Switzerland. In New Zealand few of the mountains have been scaled; many of the peaks and most of the glaciers are as yet unnamed; and there is still, in parts of the Middle Island, a fine field for exploration and discovery—geographical, geological, and botanical. The wonders of the Southern Alps are only beginning to be known; but the more they are known the more they are appreciated. The snow-line in New Zealand being so much lower than in Switzerland, the scenery, though the mountains are not quite so high, is of surpassing grandeur.

There are extensive glaciers on both sides of the range, those on the west being of exceptional beauty, as, from the greater abruptness of the mountain-slopes on that side, they descend to within about 700ft. of the sea-level, and into the midst of the evergreen forest. The largest glaciers on either side of the range are easily accessible.

The following gives the sizes of some of the glaciers on the eastern slope:—

Name.	Area of Glacier.	Length of Glacier.	Greatest Width.	Average Width.
	Acres.	Miles ch.	Miles ch.	Miles ch.
Tasman	13,664	18 0	2 14	1 15
Murchison	5,800	10 70	1 5	0 66
Godley	5,312	8 0	1 55	1 3
Mueller	3,200	8 0	0 61	0 50
Hooker	2,416	7 25	0 54	0 41

The Alletsch Glacier in Switzerland, according to Ball, in the "Alpine Guide," has an average width of one mile. It is in length and width inferior to the Tasman Glacier.

Numerous sounds or fiords penetrate the south-western coast. They are long, narrow, and deep (the depth of water at the upper part of Milford Sound is 1,270ft., although at the entrance only 130ft.), surrounded by giant mountains clothed with foliage to the snow-line, with waterfalls, glaciers, and snowfields at every turn. Some of the mountains rise almost precipitously from the water's edge to 5,000ft. and 6,000ft. above the sea. Near Milford, the finest of these sounds, is the great Sutherland Waterfall, 1,904ft. high.

The general surface of the northern portion of the Middle Island, comprising the Provincial Districts of Nelson and Marlborough, is mountainous, but the greater part is suitable for grazing purposes. There are some fine valleys and small plains suitable for agriculture, of which the Wairau Valley or Plain is the largest. Deep sounds, extending for many miles, break the coast-line abutting on Cook Strait. The City of Nelson is situated at the head of Blind Bay, which has a depth inwards from Cook Strait of about forty statute miles.

The Provincial District of Canterbury lies to the south of the

Marlborough District, and on the eastern side of the island. Towards the north the land is undulating; then there is a stretch of almost perfectly level country extending towards the south-west 160 miles, after which, on the south, the country is undulating as far as the borders of the Otago District. On the east a block of hill-country rises abruptly from the plain and extends for some miles seaward. This is Banks Peninsula, containing several good harbours, the principal being Port Cooper, on the north, on which is situated Lyttelton, the chief port of the district: the harbour of Akaroa, one of the finest in the colony, is on the southern coast of this peninsula.

The District of Otago is, on the whole, mountainous, but has many fine plains and valleys suitable for tillage. The mountains, except towards the west coast, are generally destitute of timber, and suitable for grazing sheep. There are goldfields of considerable extent in the interior of this district. The inland lakes are also very remarkable features. Lake Wakatipu extends over fifty-four miles in length, but its greatest width is not more than four miles, and its area only 114 square miles. It is 1,070ft. above sea-level, and has a depth varying from 1,170ft. to 1,296ft. Te Anau Lake is somewhat larger, having an area of 132 square miles. These lakes are bounded on the west by broken, mountainous, and wooded country, extending to the ocean.

The chief harbours in Otago are Port Chalmers, at the head of which Dunedin is situated, and the Bluff Harbour, at the extreme south.

The District of Westland, extending along the west coast of the Middle Island, abreast of Canterbury, is more or less auriferous throughout. The western slopes of the central range of mountains are clothed with forest-trees to the snow-line; but on the eastern side timber is scarce, natural grasses covering the ground.

The rivers in the Middle Island are for the most part mountain torrents, fed by glaciers in the principal mountain ranges. When the snow melts they rise in flood, forming, where not confined by rocky walls, beds of considerable width, generally covered by enormous deposits of shingle. The largest river in the colony as regards volume of water is the Clutha. It is 154 miles in length, but is only navigable for boats or small river-steamers for about thirty miles. The Rivers Buller, Grey, and Hokitika, on the West Coast, are navigable for a short distance from their mouths. They form the only ports in the Westland District. In their unimproved state they admitted, owing to the bars at their mouths, none but vessels of small draught; but, in consequence of the importance of the Grey and Buller Rivers as the sole ports available for the coal-export trade, large harbour-works have been undertaken, resulting in the deepening of the beds of these rivers, and giving a depth of from 18ft. to 24ft. of water on the bars.

The area of level or undulating land in the Middle Island available for agriculture is estimated at about 15,000,000 acres. About

13,000,000 are suitable for pastoral purposes only, or may become so when cleared of forest and sown with grass-seed. The area of barren land and mountain-tops is estimated at about 8,000,000 acres.

Foveaux Strait.

Foveaux Strait separates the Middle from Stewart Island. This last island has an area of only 425,390 acres. It is mountainous, and for the most part covered with forest.

The Outlying Islands.

The outlying group of the Chatham Islands, 480 statute miles east-south-east from Wellington, and 536 miles eastward of Lyttelton, consists of two principal islands and several unimportant islets. The largest island contains about 222,490 acres, of which an irregularly-shaped lake or lagoon absorbs 45,960 acres. About one quarter of the surface of the land is covered with forest, the rest with fern or grass. The hills nowhere rise to a great height. Pitt Island is the next in size; the area is 15,330 acres. The greater portion of both islands is used for grazing sheep.

The Kermadec group of islands, four in number, is situated between 29° 10′ and 31° 30′ south latitude, and between 177° 45′ and 179° west longitude. They are named Raoul or Sunday Island, Macaulay Island, Curtis Island, and L'Espérance or French Rock. The principal island, Sunday, is 600 miles distant from Auckland. The islands are volcanic, and in two of them signs of activity are still to be seen. The rainfall is plentiful, but not excessive. The climate is mild and equable, and slightly warmer than the north of New Zealand. The following are the areas of the islands and islets of the group: Sunday Island, 7,200 acres; Herald group of islets, 85 acres; Macaulay Island, 764 acres; Curtis Islands, 128 acres and 19 acres; L'Espérance, 12 acres: total, 8,208 acres. Sunday Island is twenty miles in circumference, roughly triangular in shape, and at the highest point 1,723ft. above the sea-level. It is rugged and broken over a very large extent of its surface, and, except in a few places, covered with forest. The soil everywhere on the island is very rich, being formed by the decomposition of a dark-coloured pumiceous tuff and a black andesitic lava, with which is closely mixed a fine vegetable mould. The great luxuriance and richness of the vegetation bear witness to the excellence of the soil, which is everywhere—except where destroyed by eruptions, and on the steep cliffs—the same rich loam. Want of water is one of the drawbacks. Three of the four lakes on the island are fresh, but so difficult of approach as to be practically useless.

The Auckland Islands are about 290 miles south of Bluff Harbour, their position being given on the Admiralty chart as latitude 50° 31′ 29″ S., and longitude 166° 19′ 12″ E. They have several good harbours. Port Ross, at the north end of the principal island, was described by the eminent French commander, D'Urville, as one of the best harbours of refuge in the known world. At the

southern end of the island there is a through passage extending from the east to the west coast. It has been variously named Adam's Strait and Carnley Harbour, and forms a splendid sheet of water. The largest of the islands is about 27 miles long by about 15 miles broad, and is very mountainous, the highest part being about 2,000ft. above the sea. The west coast is bold and precipitous, but the east coast has several inlets. The wood on the island is, owing to the strong prevailing wind, scrubby in character. The New Zealand Government maintains at this island a dépôt of provisions and clothing for the use of shipwrecked mariners.

Constitution.

British sovereignty was proclaimed over New Zealand in January, 1840, and the country became a dependency of New South Wales until the 3rd May, 1841, when it was made a separate colony. The seat of Government was at Auckland, and the Executive included the Governor, and three gentlemen holding office as Colonial Secretary, Attorney-General, and Colonial Treasurer.

The successors of these gentlemen, appointed in August, 1841, May, 1842, and January, 1844, respectively, continued in office until the establishment of Responsible Government on the 7th May, 1856. Only one of them—Mr. Swainson, the Attorney-General—sat as a member of the first General Assembly, opened on the 27th May, 1854. During the session of that year there were associated with the permanent members of the Executive Council certain members of the General Assembly. These latter held no portfolios.

The Government of the colony was at first vested in the Governor, who was responsible only to the Crown; but in 1852 an Act granting representative institutions to the colony was passed by the Imperial Legislature. Under it the constitution of a General Assembly for the whole colony was provided for, to consist of a Legislative Council, the members of which were to be nominated by the Governor, and of an elective House of Representatives. The first session of the General Assembly was opened on the 27th May, 1854, but the members of the Executive were not responsible to Parliament. The first Ministers under a system of Responsible Government were appointed on the 18th April, 1856. By the Act of 1852 the colony was divided into six provinces, each to be presided over by an elective Superintendent, and to have an elective Provincial Council, empowered to legislate, except on certain specified subjects. The franchise amounted practically to household suffrage. In each case the election was for four years, but a dissolution of the Provincial Council by the Governor could take place at any time, necessitating a fresh election both of the Council and of the Superintendent. The Superintendent was chosen by the whole body of electors of the province; each member of the Provincial Council by the electors of a district. The Provincial Governments, afterwards increased to nine, remained as integral parts of the Constitution of the colony until the 1st November, 1876, when they

were abolished by an Act of the General Assembly, that body having been vested with the power of altering the Constitution Act. On the same day an Act of the General Assembly which subdivided the colony (exclusive of the areas included within municipalities) into counties, and established a system of local county government, came into force.

GOVERNMENT.

The Governor is appointed by the Queen. His salary is £5,000 a year, and is provided by the colony.

Members of the Legislative Council hold their seats under writs of summons from the Governor. Till the year 1891 the appointments were for life; but in September of that year an Act was passed making appointments after that time tenable for seven years only, though Councillors may be reappointed. In either case seats may be vacated by resignation or extended absence. Two members of the Council are aboriginal native chiefs.

The members of the House of Representatives are elected for three years from the time of each general election; but at any time a dissolution of Parliament by the Governor may render a general election necessary. Four of the members are representatives of Native constituencies. An Act was passed in 1887 which provided that, on the dissolution of the then General Assembly, the number of members to be thereafter elected to the House of Representatives should be seventy-four in all, of whom four were to be elected, under the provisions of the Maori Representation Acts, as representatives of Maori electors only. For the purposes of European representation the colony is divided into sixty-two electoral districts, four of which—the Cities of Auckland, Wellington, Christchurch, and Dunedin—return each three members, and all the other electorates one each. Members of the House of Representatives are chosen by the votes of the inhabitants in every electoral district appointed for that purpose.

In 1889 an amendment of the Representation Act was passed, which contained a provision prohibiting any elector from giving his vote in respect of more than one electorate at any election. "The Electoral Act, 1893," extended to women of both races the right to register as electors, and to vote at the elections for members of the House of Representatives. The qualification for registration is the same for both sexes. No person is entitled to be registered on more than one electoral roll within the colony. Women are not qualified to be elected as members of the House of Representatives. The electoral laws are the subject of special comment further on in this work. Every man registered as an elector, and not coming within the meaning of section 8 of "The Electoral Act, 1893," is qualified to be elected a member of the House of Representatives for any electoral district. For European representation every adult person, if resident one year in the colony and three months in one electoral district, can be registered as an elector. Freehold property

of the value of £25 held for six months preceding the day of registration until 1896 entitled a man or woman to register, if not already registered under the residential qualification. But the Amendment Act of 1896 abolished the property qualification (except in case of existing registrations), and residence alone now entitles a man or woman to have his or her name placed upon an electoral roll. For Maori representation every adult Maori resident in any Maori electoral district (of which there are four only in the colony) can vote. Registration is not required in Native districts.

The Seat of Government.

Up to the year 1865 the seat of Government of New Zealand was at Auckland. Several attempts were made by members of Parliament, by motions in the Legislative Council and House of Representatives, to have it removed to some more central place; but it was not until November, 1863, that Mr. Domett (the then ex-Premier) was successful in carrying resolutions in the House of Representatives that steps should be taken for appointing some place in Cook Strait as the permanent seat of Government in the colony. The resolutions adopted were: "(1.) That it has become necessary that the seat of Government in the colony should be transferred to some suitable locality in Cook Strait. (2.) That, in order to promote the accomplishment of this object, it is desirable that the selection of the particular site in Cook Strait should be left to the arbitrament of an impartial tribunal. (3.) That, with this view, a Bill should be introduced to give effect to the above resolutions." On the 25th November an address was presented to the Governor, Sir George Grey, K.C.B., by the Commons of New Zealand, requesting that the Governors of the Colonies of New South Wales, Victoria, and Tasmania, might each be asked to appoint one Commissioner for the purpose of determining the best site in Cook Strait. Accordingly, the Hon. Joseph Docker, M.L.C., New South Wales; the Hon. Sir Francis Murphy, Speaker of the Legislative Council, Victoria; and R. C. Gunn, Esq., Tasmania, were appointed Commissioners.

These gentlemen, having made a personal inspection of all suitable places, arrived at the unanimous decision "that Wellington, in Port Nicholson, was the site upon the shores of Cook Strait which presented the greatest advantages for the administration of the government of the colony."

The seat of Government was, therefore, in accordance with the recommendations of the Commissioners, removed to Wellington in February, 1865.

Public Works.

Nearly all the public works of New Zealand are in the hands of the Government of the colony, and in the early days they simply kept pace with the spread of settlement. In 1870, however, a great impetus was given to the progress of the whole country by the

inauguration of the "Public Works and Immigration Policy," which provided for carrying out works in advance of settlement. Railways, roads, and water-races were constructed, and immigration was conducted on a large scale. As a consequence, the population increased from 267,000 in 1871 to 501,000 in 1881, and to 714,162 at the close of the year 1896, exclusive of Maoris.

SUCCESSIVE GOVERNORS.

SUCCESSION OF GOVERNORS OF NEW ZEALAND, AND THE DATES ON WHICH THEY ASSUMED AND RETIRED FROM THE GOVERNMENT.

Captain William Hobson, R.N., from Jan., 1840, to 10 Sept., 1842.

[British sovereignty was proclaimed by Captain Hobson in January, 1840, and New Zealand became a dependency of the Colony of New South Wales until 3rd May, 1841, at which date it was proclaimed a separate colony. From January, 1840, to May, 1841, Captain Hobson was Lieutenant-Governor of New Zealand under Sir George Gipps, Governor of New South Wales, and from May, 1841, Governor of New Zealand; the seat of Government being at Auckland, where he died in September, 1842. From the time of Governor Hobson's death, in September, 1842, until the arrival of Governor Fitzroy, in December, 1843, the Government was carried on by the Colonial Secretary, Lieutenant Shortland.]

Lieutenant Shortland, Administrator, from 10 Sept., 1842, to 26 Dec., 1843.

Captain Robert Fitzroy, R.N., from 26 Dec., 1843, to 17 Nov., 1845.

Captain Grey (became Sir George Grey, K.C.B., in 1848), from 18 Nov., 1845, to 31 Dec., 1853.

[Captain Grey held the commission as Lieutenant-Governor of the colony until the 1st January, 1848, when he was sworn in as Governor-in-Chief over the Islands of New Zealand, and as Governor of the Province of New Ulster and Governor of the Province of New Munster. After the passing of the New Zealand Constitution Act, Sir George Grey was, on the 13th September, 1852, appointed Governor of the colony, the duties of which office he assumed on the 7th March, 1853. In August, 1847, Mr. E. J. Eyre was appointed Lieutenant-Governor of New Munster: he was sworn in, 28th January, 1848. On 3rd January, 1848, Major-General George Dean Pitt was appointed Lieutenant-Governor of New Ulster: he was sworn in, 14th February, 1848; died, 8th January, 1851; and was succeeded as Lieutenant-Governor by Lieutenant-Colonel Wynyard, appointed 14th April, 1851; sworn in, 26th April, 1851. The duties of the Lieutenant-Governor ceased on the assumption by Sir George Grey of the office of Governor, on the 7th March, 1853.]

Lieutenant-Colonel Robert Henry Wynyard, C.B., Administrator, from 6 Jan., 1854, to 6 Sept., 1855.

Colonel Thomas Gore Browne, C.B., from 6 Sept., 1855, to 2 Oct., 1861.
Sir George Grey, K.C.B., Administrator, from 3 Oct., 1861; Governor, from 4 Dec., 1861, to 5 Feb., 1868.
Sir George Ferguson Bowen, G.C.M.G., from 5 Feb., 1868, to 19 Mar., 1873.
Sir George Alfred Arney, Chief Justice, Administrator, from 21 Mar. to 14 June, 1873.
Sir James Fergusson, Baronet, P.C., from 14 June, 1873, to 3 Dec., 1874.
The Marquis of Normanby, P.C., G.C.M.G., Administrator, from 3 Dec., 1874; Governor, from 9 Jan., 1875, to 21 Feb., 1879.
James Prendergast, Esquire, Chief Justice, Administrator, from 21 Feb. to 27 Mar., 1879.
Sir Hercules George Robert Robinson, G.C.M.G., Administrator, from 27 Mar., 1879; Governor, from 17 April, 1879, to 8 Sept., 1880.
James Prendergast, Esquire, Chief Justice, Administrator, from 9 Sept. to 29 Nov., 1880.
The Honourable Sir Arthur Hamilton Gordon, G.C.M.G., from 29 Nov., 1880, to 23 June, 1882.
Sir James Prendergast, Chief Justice, Administrator, from 24 June, 1882, to 20 Jan., 1883.
Lieutenant-General Sir William Francis Drummond Jervois, G.C.M.G., C.B., from 20 Jan., 1883, to 22 Mar., 1889.
Sir James Prendergast, Chief Justice, Administrator, from 23 Mar. to 2 May, 1889.
The Earl of Onslow, G.C.M.G., from 2 May, 1889, to 24 Feb., 1892.
Sir James Prendergast, Chief Justice, Administrator, from 25 Feb., to 6 June, 1892.
The Earl of Glasgow, G.C.M.G., from 7 June, 1892, to 6 Feb., 1897.
Sir James Prendergast, Chief Justice, Administrator, from 8 Feb., 1897.

SUPREME COURT JUDGES.

Supreme Court Judges, past and present, with Dates of Appointment, and of Resignation or Death.

Sir W. Martin, appointed Chief Justice, 10 Jan., 1842. Resigned, 12 June, 1857.
H. S. Chapman, appointed, 26 Dec., 1843. Resigned, 30 July, 1850. Reappointed, 23 Mar., 1864. Resigned, 31 Mar., 1875.
S. Stephen, appointed, 30 July, 1850. Appointed Acting Chief Justice, 20 Oct., 1855. Died, 13 Jan., 1858.
Daniel Wakefield, appointed, Oct., 1855. Died, Oct., 1857.

H. B. Gresson, appointed temporarily, 8 Dec., 1857. Permanently, 1 July, 1862. Resigned, 31 Mar., 1875.
Sir G. A. Arney, appointed Chief Justice, 1 Mar., 1858. Resigned, 31 Mar., 1875.
A. J. Johnston, appointed, 2 Nov., 1858. Died, 1 June, 1888.
C. W. Richmond, appointed, 20 Oct., 1862. Died, 3 Aug., 1895.
J. S. Moore, appointed temporarily, 15 May, 1866. Relieved, 30 June, 1868.
C. D. R. Ward, appointed temporarily, 1 Oct., 1868. Relieved, May, 1870. Appointed temporarily, 21 Sept., 1886. Relieved, 12 Feb., 1889.
Sir J. Prendergast, appointed Chief Justice, 1 April, 1875.
T. B. Gillies, appointed, 3 Mar., 1875. Died, 26 July, 1889.
J. S. Williams, appointed, 3 Mar., 1875.
J. E. Denniston, appointed, 11 Feb., 1889.
E. T. Conolly, appointed, 19 Aug., 1889.
Hon. Sir P. A. Buckley, K.C.M.G., appointed, 20 Dec., 1895. Died, 18 May, 1896.
W. B. Edwards, appointed, 11 July, 1896.

EXECUTIVE COUNCIL, 1843–56.

MEMBERS OF THE EXECUTIVE COUNCIL OF THE COLONY OF NEW ZEALAND PREVIOUS TO THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT (NOT INCLUDING THE OFFICERS COMMANDING THE FORCES).

Willoughby Shortland, Colonial Secretary, from 3 May, 1841, to 31 Dec., 1843; succeeded by Mr. Sinclair.
Francis Fisher, Attorney-General, from 3 May to 10 Aug., 1841; succeeded by Mr. Swainson.
George Cooper, Colonial Treasurer, from 3 May, 1841, to 9 May, 1842; succeeded by Mr. Shepherd.
William Swainson, Attorney-General, from 10 Aug., 1841, to 7 May, 1856.
Alexander Shepherd, Colonial Treasurer, from 9 May, 1842, to 7 May, 1856.
Andrew Sinclair, Colonial Secretary, from 6 Jan., 1844, to 7 May, 1856.

[The three gentlemen last mentioned were nominated by Her Majesty as *ex officio* members of the Executive Council. Two of them, the Colonial Secretary and the Colonial Treasurer, were not members of the General Assembly, opened for the first time 27th May, 1854, but all three remained in office until the establishment of Responsible Government.]

James Edward FitzGerald, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.

Henry Sewell, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.
Frederick Aloysius Weld, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.
Francis Dillon Bell, M.L.C., without portfolio, from 30 June to 11 July, 1854.
Thomas Houghton Bartley, M.L.C., without portfolio, from 14 July to 2 Aug., 1854.
Thomas Spencer Forsaith, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.
Edward Jerningham Wakefield, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.
William Thomas Locke Travers, M.H.R., without portfolio, 31 Aug. to 2 Sept., 1854.
James Macandrew, M.H.R., without portfolio, from 31 Aug. to Sept., 1854.

PARLIAMENTS.

NUMBER OF PARLIAMENTS SINCE THE CONSTITUTION ACT PASSED FOR CONFERRING REPRESENTATIVE INSTITUTIONS UPON THE COLONY OF NEW ZEALAND, WITH THE DATES OF OPENING AND CLOSING OF SESSIONS AND DATES OF DISSOLUTION.

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
First (dissolved 15th September, 1855)	27 May, 1854 ..	9 August, 1854.
	31 August, 1854 ..	16 September, 1854.
	8 August, 1855 ..	15 September, 1855.
Second (dissolved 5th November, 1860)	15 April, 1856 ..	16 August, 1856.
	(No session in 1857)	
	10 April, 1858 ..	21 August, 1858.
	(No session in 1859)	
	30 July, 1860 ..	5 November, 1860.
Third (dissolved 27th January, 1866)	3 June, 1861 ..	7 September, 1861.
	7 July, 1862 ..	15 September, 1862.
	19 October, 1863 ..	14 December, 1863.
	24 November, 1864	13 December, 1864.
	26 July, 1865 ..	30 October, 1865.
Fourth (dissolved 30th December, 1870)	30 June, 1866 ..	8 October, 1866.
	9 July, 1867 ..	10 October, 1867.
	9 July, 1868 ..	20 October, 1868.
	1 June, 1869 ..	3 September, 1869.
	14 June, 1870 ..	13 September, 1870.

PARLIAMENTS—*continued.*

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
Fifth (dissolved 6th December, 1875)	14 August, 1871 ..	16 November, 1871.
	16 July, 1872 ..	25 October, 1872.
	15 July, 1873 ..	3 October, 1873.
	3 July, 1874 ..	31 August, 1874.
	20 July, 1875 ..	21 October, 1875.
Sixth (dissolved 15th August, 1879)	15 June, 1876 ..	31 October, 1876.
	19 July, 1877 ..	10 December, 1877.
	26 July, 1878 ..	2 November, 1878.
	11 July, 1879 ..	11 August, 1879.
Seventh (dissolved 8th November, 1881)	24 September, 1879	19 December, 1879.
	28 May, 1880 ..	1 September, 1880.
	9 June, 1881 ..	24 September, 1881.
Eighth (dissolved 27th June, 1884)	18 May, 1882 ..	15 September, 1882.
	14 June, 1883 ..	8 September, 1883.
	5 June, 1884 ..	24 June, 1884.
Ninth (dissolved 15th July, 1887) ..	7 August, 1884 ..	10 November, 1884.
	11 June, 1885 ..	22 September, 1885.
	13 May, 1886 ..	18 August, 1886.
	26 April, 1887 ..	10 July, 1887.
Tenth (dissolved 3rd October, 1890)	6 October, 1887 ..	23 December, 1887.
	10 May, 1888 ..	31 August, 1888.
	20 June, 1889 ..	19 September, 1889.
	19 June, 1890 ..	18 September, 1890.
Eleventh (dissolved 8th November, 1893)	23 January, 1891 ..	31 January, 1891.
	11 June, 1891 ..	5 September, 1891.
	23 June, 1892 ..	12 October, 1892.
	22 June, 1893 ..	7 October, 1893.
Twelfth (dissolved 14th November, 1896)	21 June, 1894 ..	24 October, 1894.
	20 June, 1895 ..	2 November, 1895.
	11 June, 1896 ..	19 October, 1896.
Thirteenth	7 April, 1897.	12 April, 1897.

SUCCESSIVE MINISTRIES

SINCE THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT IN NEW ZEALAND IN 1856.

Name of Ministry.	Assumed Office.	Retired.
1. Bell-Sewell	7 May, 1856	20 May, 1856.
2. Fox	20 May, 1856	2 June, 1856.
3. Stafford	2 June, 1856	12 July, 1861.
4. Fox	12 July, 1861	6 August, 1862.
5. Domett	6 August, 1862	30 October, 1863.
6. Whitaker-Fox	30 October, 1863	24 November, 1864.
7. Weld	24 November, 1864	16 October, 1865.
8. Stafford	16 October, 1865	28 June, 1869.
9. Fox	28 June, 1869	10 September, 1872.
10. Stafford	10 September, 1872	11 October, 1872.
11. Waterhouse	11 October, 1872	3 March, 1873.
12. Fox	3 March, 1873	8 April, 1873.
13. Vogel	8 April, 1873	6 July, 1875.
14. Pollen	6 July, 1875	15 February, 1876.
15. Vogel	15 February, 1876	1 September, 1876.
16. Atkinson	1 September, 1876	13 September, 1876.
17. Atkinson (reconstituted)	13 September, 1876	13 October, 1877.
18. Grey	15 October, 1877	8 October, 1879.
19. Hall	8 October, 1879	21 April, 1882.
20. Whitaker	21 April, 1882	25 September, 18
21. Atkinson	25 September, 1883	16 August, 1884.
22. Stout-Vogel	16 August, 1884	28 August, 1884.
23. Atkinson	28 August, 1884	3 September, 1884.
24. Stout-Vogel	3 September, 1884	8 October, 1887.
25. Atkinson	8 October, 1887	24 January, 1891.
26. Ballance	24 January, 1891	1 May, 1893.*
27. Seddon	1 May, 1893.	

* Owing to the death of the Premier, the Hon. J. Ballance, on 27th April, 1893.

PREMIERS OF SUCCESSIVE MINISTRIES.

Name of Premier.	Name of Premier.
Henry Sewell.	Sir Julius Vogel, K.C.M.G.
William Fox.	Harry Albert Atkinson.
Edward William Stafford.	Harry Albert Atkinson (Ministry reconstituted).
William Fox.	Sir George Grey, K.C.B.
Alfred Domett.	Hon. John Hall.
Frederick Whitaker.	Frederick Whitaker, M.L.C.
Frederick Aloysius Weld.	Harry Albert Atkinson.
Edward William Stafford.	Robert Stout.
William Fox.	Harry Albert Atkinson.
Hon. Edward William Stafford.	Sir Robert Stout, K.C.M.G.
George Marsden Waterhouse.	Sir Harry Albert Atkinson, K.C.M.G.
Hon. William Fox.	John Ballance.
Hon. Julius Vogel, C.M.G.	Richard John Seddon.
Daniel Pollen, M.L.C.	

SPEAKERS OF THE LEGISLATIVE COUNCIL,

WITH DATES OF THEIR APPOINTMENT AND DATES OF RETIREMENT OR DEATH.

Name of Speaker.	Date of Appointment.	Date of Retirement or Death.
Hon. William Swainson	16 May, 1854 ..	8 August, 1855.
Hon. Frederick Whitaker	8 August, 1855 ..	12 May, 1856.
Hon. Thomas Houghton Bartley ..	12 May, 1856 ..	1 July, 1868.
Hon. Sir John Larkins Cheese Richardson, Kt.	1 July, 1868 ..	14 June, 1879.
Hon. Sir William Fitzherbert, K.C.M.G.	14 June, 1879 ..	23 January, 1891.
Hon. Sir Harry Albert Atkinson, K.C.M.G.	23 January, 1891	28 June, 1892.
Hon. Henry John Miller	8 July, 1892.	

SPEAKERS OF THE HOUSE OF REPRESENTATIVES,

WITH DATES OF THEIR ELECTION AND DATES OF RETIREMENT.

Name of Speaker.	Date of Election.	Date of Retireme
Sir Charles Clifford, Bart.	26 May, 1854	
	15 April, 1856 ..	3 June, 1861.
Sir David Monro, Kt. Bach. ..	3 June, 1861	
	30 June, 1866 ..	13 Sept., 1870.
Sir Francis Dillon Bell, K.C.M.G., C.B.	14 August, 1871 ..	21 October, 1875.
Sir William Fitzherbert, K.C.M.G. ..	15 June, 1876 ..	13 June, 1879.
Sir George Maurice O'Rorke, Kt. Bach.	11 July, 1879	
	24 September, 1879	
	18 May, 1882	
	7 August, 1884	
	6 October, 1887	3 October, 1890.
Hon. Major William Jukes Steward ..	23 January, 1891	8 November, 1893.
Hon. Sir George Maurice O'Rorke, Kt. Bach.	21 June, 1894	
	6 June, 1897.	

FOREIGN CONSULS.

CONSULS OF FOREIGN COUNTRIES RESIDING IN, OR WITH JURISDICTION OVER, NEW ZEALAND, AUGUST, 1896.

Country represented.	Office held.	Name.	Place of Residence.
Austria-Hungary	Consul ..	Julius Mergell	Sydney.
Belgium ..	Consul-General	Edouard Pollet	Melbourne.
" ..	Consul ..	Charles John Johnston ..	Wellington.
" ..	" ..	Alexander Beck	Christchurch.
" ..	Acting Consul..	Valdemar Johansen ..	Auckland.
Chili	Consul-General	William Henry Eldred ..	Sydney.

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
Denmark ..	Consul (for North Island)	Edward Valdemar Johansen	Auckland.
" ..	Consul (for South Island)	Emil Christian Skog ..	Christchurch.
" ..	Vice-Consul ..	Francis Henry Dillon Bell ..	Wellington.
" ..	" ..	Edmund Quick	Dunedin.
France ..	Consul (for New Zealand)	Viscount Alexandre Louis Ferdinand De Jouffroy D'Abbans	Wellington.
" ..	Consular Agent	Ambrose Millar	Auckland.
" ..	"	Percival Clay Neill ..	Dunedin.
" ..	"	Hon. Edmund William Parker	Christchurch.
German Empire	Consul-General	A. Pelldram	Sydney.
"	Consul ..	Bendix Hallenstein ..	Dunedin.
"	" ..	Philip Kippenberger ..	Christchurch.
"	" ..	Friedrich August Krull ..	Wanganui.
"	" ..	Carl Seegner	Auckland.
"	Vice-Consul ..	Augustus Friedrich Castendyk	Wellington.
Hawaiian Islands	Consul-General (for Australasia)	W. E. Dixon	Sydney.
"	Consul ..	James Macfarlane ..	Auckland.
"	" ..	William Godfrey Neill ..	Dunedin.
Italy	Consul-General (in Australia)	Commendatore P. Corte ..	Melbourne.
"	Consular Agent	(Vacant)	Christchurch.
"	"	George Fisher	Wellington.
"	"	Edward Bowes Cargill ..	Dunedin.
"	"	Geraldo Giuseppe Perotti ..	Greymouth.
"	"	R. Rose (acting)	Auckland.
Netherlands ..	Consul-General	Dr. Laon Adrian de Vicq ..	Melbourne.
" ..	Consul ..	Charles John Johnston ..	Wellington.
" ..	Vice-Consul ..	Edward Bowes Cargill ..	Dunedin.
Portugal ..	Consul ..	John Duncan	Wellington.
" ..	Vice-Consul ..	Henry Rees George ..	Auckland.
" ..	" ..	Edmund Quick	Dunedin.
Russia ..	Consul ..	Baron d'Ungern-Sternberg..	Melbourne.
Spain.. ..	Vice-Consul ..	Don Francisco Arenas Y. Bonet	Christchurch.
Sweden and Norway	Consul ..	Edward Pearce .. .. A. E. Pearce (acting).	Wellington.
"	Vice-Consul ..	Edward Valdemar Johansen	Auckland.
"	" ..	Frank Graham	Christchurch.
United States ..	Consul-General	Daniel W. Maratta ..	Melbourne.
" ..	Consul (for New Zealand)	John Darcy Connolly ..	Auckland.
" ..	Vice-Consul ..	Leonard A. Bachelder ..	Auckland.
" ..	Consular Agent	Robert Pitcaithley ..	Christchurch.
" ..	"	Robert Wyles	Mongonui.
" ..	"	Thomas Cahill, M.D. ..	Wellington.
" ..	"	William Godfrey Neill ..	Dunedin.

AGENT-GENERAL FOR NEW ZEALAND IN LONDON.

The Hon. W. P. Reeves, Westminster Chambers, 13, Victoria treet, S.W. Secretary—Walter Kennaway, C.M.G.

AGENTS-GENERAL FOR AUSTRALASIA.

Queensland.—General Sir H. W. Norman, G.C.B., G.C.M.G., Westminster Chambers, 1, Victoria Street, S.W. Secretary—Charles Shortt Dicken, C.M.G.

New South Wales.—The Hon. Sir Saul Samuel, K.C.M.G., C.B., Westminster Chambers, 9, Victoria Street, S.W. Secretary—S. Yardley, C.M.G.

Victoria.—Lieut.-General Hon. Sir Andrew Clarke, R.E., G.C.M.G. (acting), 15, Victoria Street, S.W. Secretary—S. B. H. Rodgerson (acting).

South Australia.—The Hon. Thomas Playford, Victoria Chambers, 15, Victoria Street, S.W. Secretary—T. F. Wickstead.

Western Australia.—The Hon. Sir Malcolm Fraser, K.C.M.G., 15, Victoria Street, Westminster, S.W. Secretary—Reginald Charles Hare.

Tasmania.—Sir Westby Brook Percival, K.C.M.G., Westminster Chambers, 5, Victoria Street, S.W.

THE COLONIAL OFFICE.

JUNE, 1897.

(DOWNING STREET, S.W., LONDON), WITH DATES OF APPOINTMENT.

Principal Secretary of State for the Colonies—The Right Hon. Joseph Chamberlain, M.P., 28th June, 1895.

Under-Secretaries: Parliamentary—The Right Hon. the Earl of Selborne, 28th June, 1895. Permanent—The Hon. Sir Robert Henry Meade, K.C.B., 1st February, 1892.

Assistant Under-Secretaries—John Bramston, D.C.L., C.B., 30th June, 1876; Edward Wingfield, B.C.L., C.B., 19th July, 1878.

CROWN AGENTS FOR THE COLONIES.

DOWNING STREET, S.W. CITY OFFICE: 1, TOKENHOUSE BUILDINGS, E.C., LONDON.

Crown Agents—Sir Montagu Frederick Ommanney, K.C.M.G., Ernest Edward Blake, and Major M. A. Cameron, R.E.

HONOURS HELD BY COLONISTS.

Bell, Hon. Sir Francis Dillon, Knt. Bach., 1873; K.C.M.G., 1881; C.B., 1886.
Buller, Sir Walter Lawry, F.R.S., C.M.G., 1875; K.C.M.G., 1886.
Grace, Hon. Morgan Stanislaus, C.M.G., 1890.
Grey, Right Hon. Sir George, K.C.B., 1848; P.C., 1894.
Hall, Hon. Sir John, K.C.M.G., 1882.
Hector, Sir James, F.R.S., C.M.G., 1875; K.C.M.G., 1887.
Larnach, Hon. William James Mudie, C.M.G., 1879.
O'Rorke, Hon. Sir George Maurice, Knt. Bach., 1880.
Perceval, Sir Westby Brook, K.C.M.G, 1894.
Prendergast, Sir James, Knt. Bach., 1881.
Richardson, Hon. Edward, C.M.G., 1879.
Roberts, John, Esq., C.M.G., 1891.
Stafford, Hon. Sir Edward William, K.C.M.G., 1879; G.C.M.G., 1887.
Stout, Hon. Sir Robert, K.C.M.G., 1886.
Vogel, Hon. Sir Julius, C.M.G., 1872; K.C.M.G., 1875.
Whitmore, Hon. Colonel Sir George Stoddart, C.M.G., 1869; K.C.M.G., 1882.

PERSONS ALLOWED TO RETAIN THE TITLE OF "HONOURABLE" WITHIN HER MAJESTY'S DOMINIONS.

By despatch from the Secretary of State for the Colonies, dated Downing Street, 15th June, 1893, His Excellency the Governor was apprised that the title of "Honourable," appertaining to Members of the Executive and Legislative Councils in colonies possessing Responsible Government, whether confined to duration of office or continued for life, is approved by Her Majesty for use and recognition throughout her dominions, either during office or for life, as the case may be.

By further despatch of 10th March, 1894, the Secretary of State announces that he is prepared in future to submit for the approval of the Queen the recommendation of the Governor of any colony having Responsible Government that the President of the Legislative Council or the Speaker of the Legislative Assembly may, on quitting office after three years' service in their respective offices, be permitted to retain the title of "Honourable." This title has since been conferred on Sir F. D. Bell, Sir G. M. O'Rorke, and Major William Jukes Steward.

Besides the Members of the Executive and Legislative Councils, the following ex-Ministers whose names do not appear in the list given above are allowed, as such, to retain the title of "Honourable": Bryce, John, 1884; Dick, Thomas, 1884; Fergus, Thomas, 1891; Gisborne, William, 1873; Haultain, Colonel T. M., 1870; Hislop, Thomas W., 1891; Johnston, Walter W., 1884; Mitchelson, Edwin, 1891; Oliver, Richard, 1884; Reeves, William P., 1896; Reynolds, William H., 1876; Richardson, George F., 1891; Rolleston, William, 1884; Tole, Joseph A., 1888; Ward, Joseph George, 1896.

ADMINISTRATOR OF THE GOVERNMENT.

JUNE, 1897.

Sir James Prendergast, Kt., Chief Justice.

A dormant commission empowers the Chief Justice of the Colony for the time being to administer the Government in case of the death, incapacity, removal, or departure of the Governor. The Earl of Glasgow having left New Zealand on the 6th February, 1897, the Chief Justice assumed the administration on the 8th of that month.

EXECUTIVE COUNCIL.

JUNE, 1897.

His Excellency the GOVERNOR presides.

Hon. R. J. Seddon, Premier, Colonial Treasurer, Commissioner of Trade and Customs, Postmaster-General, Electric Telegraph Commissioner, Minister of Labour, and Minister of Native Affairs.

Hon. J. McKenzie, Minister of Lands, Minister of Agriculture, Commissioner of Forests, and Minister in Charge of Advances to Settlers Office.

Hon. A. J. Cadman, Minister for Railways and Minister of Mines.

Hon. J. Carroll, Commissioner of Stamp Duties, Acting Colonial Secretary, and Member of Executive Council representing the Native Race.

Hon. W. C. Walker, Minister of Immigration, Minister of Education, and Minister in Charge of Hospitals and Charitable Aid.

Hon. W. Hall-Jones, Minister for Public Works, Minister of Marine, and Minister in Charge of Printing Office.

Hon. T. Thompson, Minister of Justice, Minister of Defence, and Minister of Industries and Commerce.

Clerk of Executive Council—Alexander James Willis.

THE GENERAL ASSEMBLY.

LEGISLATIVE COUNCIL.

The number of members at present constituting the Legislative Council is forty-seven. The number cannot be less than ten, but is otherwise unlimited. Prior to 1891 Councillors summoned by the Governor held their appointments for life; but on the 17th of September of that year an Act was passed giving the Council power to elect its own Speaker for a period of five years, and making future appointments to the Council tenable for seven years only, to be reckoned from the date of the writ of summons of the Councillor's appointment, though every such Councillor may be reappointed. The qualifications

are that the person to be appointed be of the full age of twenty-one years, and a subject of Her Majesty, either natural-born or naturalised by or under any Act of the Imperial Parliament or by or under any Act of the General Assembly of New Zealand. All contractors to the public service to an amount of over £50 and Civil servants of the colony are ineligible as Councillors. Payment of Councillors is at the rate of £150 a year, payable monthly. Actual travelling-expenses to and from Wellington are also allowed. A deduction of £1 5s. per sitting day is made in case of an absence, except through illness or other unavoidable cause, exceeding five sitting days in any one session. Under "The Legislative Council Act, 1891," a seat is vacated by any member of the Council—(1), If he takes any oath or makes any declaration or acknowledgment of allegiance, obedience, or adherence to any foreign Prince or Power; or (2), if he does, or concurs in, or adopts any act whereby he may become a subject or citizen of any foreign State or Power, or is entitled to the rights, privileges, or immunities of a subject of any foreign State or Power; or (3), if he is a bankrupt, or compounds with his creditors under any Act for the time being in force; or (4), if he is a public defaulter, or is attainted of treason, or is convicted of felony or any infamous crime; or (5), if he resigns his seat by writing under his hand addressed to and accepted by the Governor; or (6), if for more than one whole session of the General Assembly he fails, without permission of the Governor notified to the Council, to give his attendance in the Council. By the Standing Orders of the Council, the presence of one-fourth of the members of the Council, exclusive of those who have leave of absence, is necessary to constitute a meeting for the exercise of its powers. This rule, however, may be altered from time to time by the Council. The ordinary sitting-days are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5 p.m., resuming again at 7.30 when necessary.

Roll of Members of the Honourable the Legislative Council of New Zealand, June, 1897.

Speaker—The Hon. Henry John Miller.

Chairman of Committees—The Hon. William Douglas Hall Baillie.

Name.	Provincial District.	Date of Appointment.
Acland, the Hon. John Barton Arundel ..	Canterbury ..	8 July, 1865.
Arkwright, the Hon. Francis	Wellington ..	13 December, 1895.
Baillie, the Hon. William Douglas Hall ..	Marlborough	8 March, 1861.
Barnicoat, the Hon. John Wallis ..	Nelson ..	14 May, 1883.
Bolt, the Hon. William Mouat	Otago ..	15 October, 1892.
Bonar, the Hon. James Alexander ..	Westland ..	27 June, 1868.
Bowen, the Hon. Charles Christopher ..	Canterbury ..	20 January, 1891.
Feldwick, the Hon. Henry	Otago ..	15 October, 1892.
Grace, the Hon. Morgan Stanislaus, C.M.G.	Wellington ..	13 May, 1870.
Harris, the Hon. Benjamin	Auckland ..	3 February, 1897.

ROLL OF MEMBERS OF THE LEGISLATIVE COUNCIL—*continued.*

Name.	Provincial District.	Date of Appointment.
Holmes, the Hon. Mathew	Otago ..	19 June, 1866.
Jenkinson, the Hon. John Edward ..	Canterbury ..	6 June, 1893.
Jennings, the Hon. William Thomas ..	Auckland ..	15 October, 1892.
Johnston, the Hon. Charles John ..	Wellington ..	20 January, 1891.
Jones, the Hon. George	Otago ..	13 December, 1895.
Kelly, the Hon. Thomas	Taranaki ..	15 October, 1892.
Kelly, the Hon. William	Auckland ..	3 February, 1897.
Kenny, the Hon. Courtney William Aylmer Thomas	Marlborough	15 May, 1885.
Kerr, the Hon. James	Westland ..	15 October, 1892.
MacGregor, the Hon. John	Otago ..	15 October, 1892.
McCullough, the Hon. William.. ..	Auckland ..	15 October, 1892.
McLean, the Hon. George	Otago ..	19 December, 1881.
Miller, the Hon. Henry John (Speaker) ..	Otago ..	8 July, 1865.
Montgomery, the Hon. William.. ..	Canterbury ..	15 October, 1892.
Morris, the Hon. George Bentham ..	Auckland ..	15 May, 1885.
Oliver, the Hon. Richard	Otago ..	10 November, 1881.
Ormond, the Hon. John Davies ..	Hawke's Bay	20 January, 1891.
Peacock, the Hon. John Thomas ..	Canterbury ..	9 October, 1877.
Pinkerton, the Hon. David	Otago ..	3 February, 1897.
Reeves, the Hon. Richard Harman Jeffares	Nelson ..	13 December, 1895.
Reynolds, the Hon. William Hunter ..	Otago ..	30 April, 1878.
Richardson, the Hon. Edward, C.M.G. ..	Wellington ..	15 October, 1892.
Rigg, the Hon. John	Wellington ..	6 June, 1893.
Scotland, the Hon. Henry	Taranaki ..	24 February, 1868.
Shephard, the Hon. Joseph	Nelson ..	15 May, 1885.
Shrimski, the Hon. Samuel Edward ..	Otago ..	15 May, 1885.
Smith, the Hon. William Cowper ..	Hawke's Bay	13 December. 1895.
Stevens, the Hon. Edward Cephas John..	Canterbury ..	7 March, 1882.
Stewart, the Hon. William Downie ..	Otago ..	20 January, 1891.
Swanson, the Hon. William	Auckland ..	15 May, 1885.
Taiaroa, the Hon. Hori Kerei	Otago ..	15 May, 1885.
Wahawaha, the Hon. Major Ropata, N.Z.C.	Auckland ..	10 May, 1887.
Walker, the Hon. Lancelot	Canterbury ..	15 May, 1885.
Walker, the Hon. William Campbell ..	Canterbury ..	15 October, 1892.
Whitmore, the Hon. Sir George Stoddart, K.C.M.G.	Hawke's Bay	31 August, 1863.
Whyte, the Hon. John Blair	Auckland ..	20 January, 1891.
Williams, the Hon. Henry	Auckland ..	7 March, 1882.

Clerk of Parliaments, Clerk of the Legislative Council, and Examiner of Standing Orders upon Private Bills—Leonard Stowe.

Clerk-Assistant—Arthur Thomas Bothamley.

Second Clerk-Assistant—George Moore.

Interpreter—Henry S. Hadfield.

HOUSE OF REPRESENTATIVES.

The number of members constituting the House of Representatives is seventy-four—seventy Europeans and four Maoris. This number was fixed by the Act of 1887, which came for the first time into practical operation at the general election of 1890. Previously (from 1881) the House consisted of ninety-five members—

ninety-one Europeans and four Maoris. The North Island returns thirty-four European members, and the Middle Island thirty-six. The Cities of Auckland, Wellington, Christchurch, and Dunedin return each three members, and all other electoral districts one each. The elections are triennial, except in the case of a dissolution by the Governor. Every registered elector, being of the male sex, and free from any of the disqualifications mentioned in section 8 of "The Electoral Act, 1893," is eligible for membership. All contractors to the public service of New Zealand to whom any public money above the sum of £50 is payable, directly or indirectly, in any one financial year, as well as the Civil servants of the colony, are incapable of being elected as or of sitting or voting as members. The payment made to members of the House of Representatives is £20 per month, amounting to £240 per annum. £2 for every sitting-day exceeding five is deducted on account of absence during session not due to sickness or other unavoidable cause. Travelling-expenses to and from Wellington are also allowed. This scale of payment came into force on the 1st January, 1893, under the provisions of "The Payment of Members Act, 1892." Twenty members, inclusive of the Speaker, constitute a quorum. Unless otherwise ordered, the sitting-days of the House are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 to 5.30, resuming at 7.30 p.m. Order of admission to the Speaker's Gallery is by ticket obtained from the Speaker. The Strangers' Gallery is open free to the public.

Roll of Members of the House of Representatives, June, 1897.

Speaker—The Hon. Sir George Maurice O'Rorke, Kt.

Chairman of Committees—Arthur Robert Guinness.

Name.	Electoral District.	Date of Notification of Return of Writ.
For European Electorates.		
Allen, Edmund Giblett	Waikouaiti ..	21 December, 1896.
Allen, James	Bruce	"
Bollard, John	Eden	"
Brown, Henry	Taranaki	"
Buchanan, Walter Clarke ..	Wairarapa ..	"
Cadman, Hon. Alfred Jerome ..	Ohinemuri ..	"
Carncross, Walter Charles Frederick	Taieri	"
Carroll, Hon. James	Waiapu	"
Carson, Gilbert	Wanganui ..	"
Crowther, William	City of Auckland ..	"
Duncan, Thomas Young	Oamaru	"
Field, Henry Augustus	Otaki	"
Fish, Henry Smith	City of Dunedin ..	"
Fisher, George	City of Wellington ..	"
Flatman, Frederick Robert ..	Geraldine ..	"
Fraser, William	Wakatipu ..	"
Gilfedder, Michael	Wallace	"
Graham, John	City of Nelson ..	"

Roll of Members of the House of Representatives—*continued.*

Name.	Electoral District.	Date of Notification of Return of Writ.
Guinness, Arthur Robert.. ..	Grey	21 December, 1896.
Hall-Jones, Hon. William ..	Timaru	"
Herries, William Herbert ..	Bay of Plenty ..	"
Hogg, Alexander Wilson ..	Masterton ..	"
Holland, James Job	City of Auckland ..	"
Houston, Robert Morrow ..	Bay of Islands ..	"
Hunter, George	Waipawa.. ..	"
Hutcheson, John	City of Wellington..	"
Hutchison, George	Patea	"
Joyce, John	Lyttelton.. ..	"
Kelly, James Whyte	Invercargill ..	"
Lang, Frederic William	Waikato	"
Larnach, Hon. William James Mudie, C.M.G.	Tuapeka	"
Lawry, Frank	Parnell	"
Lethbridge, Frank Yates ..	Rangitikei ..	"
Lewis, Charles	City of Christchurch	"
Mackenzie, Mackay John Scobie ..	City of Dunedin ..	"
McGowan, James	Thames	"
McGuire, Felix	Hawera	"
McKenzie, Hon. John	Waihemo ..	"
McKenzie, Roderick	Motueka	"
McLean, Robert Donald Douglas..	Napier	"
Massey, William Ferguson ..	Franklin	"
Meredith, Richard	Ashley	"
Millar, John Andrew	City of Dunedin ..	"
Mills, Charles Houghton.. ..	Wairau	"
Monk, Richard	Waitemata ..	"
Montgomery, William Hugh ..	Ellesmere ..	"
Moore, Richard	Kaiapoi	"
Morrison, Arthur	Caversham ..	"
O'Meara, John	Pahiatua ..	"
O'Regan, Patrick Joseph.. ..	Buller	"
O'Rorke, Hon. Sir George Maurice, Knt. Bach.	Manukau.. ..	"
Pirani, Frederick	Palmerston ..	"
Richardson, Hon. George Frederick	Mataura	"
Rolleston, Hon. William.. ..	Riccarton ..	"
Russell, William Russell ..	Hawke's Bay ..	"
Seddon, Hon. Richard John ..	Westland ..	"
Smith, George John	City of Christchurch	"
Stevens, John	Manawatu ..	"
Steward, Hon. William Jukes ..	Waitaki	"
Stout, Hon. Sir Robert, K.C.M.G.	City of Wellington	"
Symes, Walter	Egmont	"
Tanner, William Wilcox.. ..	Avon	"
Taylor, Thomas Edward.. ..	City of Christchurch	"
Thompson, Robert	Marsden	"
Thompson, Hon. Thomas ..	City of Auckland ..	"
Thomson, James William ..	Clutha	"
Ward, Hon. Joseph George ..	Awarua	"
Wason, John Cathcart	Selwyn	"
Wilson, Charles..	Suburbs of Well'gton	28 April, 1897.
Wright, Edward George	Ashburton ..	21 December, 1896.

ROLL OF MEMBERS OF THE HOUSE OF REPRESENTATIVES—*continued.*

Name.	Electoral District.	Date of Notification of Return of Writ.
For Maori Electorates.		
Heke, Hone	Northern Maori ..	14 January, 1897.
Kaihau, Henare	Western Maori ..	"
Parata, Tame	Southern Maori ..	"
Pere, Wi	Eastern Maori ..	"

Clerk of House of Representatives—G. Friend.
Clerk-Assistant—H. Otterson.
Second Clerk-Assistant—A. J. Rutherfurd.
Sergeant-at-Arms—W. Fraser.
Reader and Clerk of Bills and Papers— ————.
Chief *Hansard* Reporter—J. Grattan Grey.
Interpreters—L. M. Grace, W. E. Goff.
Clerk of Writs—H. Pollen.
Deputy Clerk of Writs—R. H. Govett.
Acting Librarian—H. L. James, B.A.

OFFICIAL LIST.

[1st June, 1897.]

CIVIL ESTABLISHMENT AT SEAT OF GOVERNMENT.

PREMIER'S OFFICE.

Premier—Hon. R. J. Seddon
Secretary to Premier and to Cabinet—A. J. Willis

COLONIAL SECRETARY'S DEPARTMENT.

CHIEF OFFICE.

Colonial Secretary—Hon. James Carroll (acting)
Under-Secretary—Hugh Pollen
Chief Clerk—R. H. Govett
Clerks—R. F. Lynch, J. F. Andrews, L. W. Loveday
Housekeeper and Chief Messenger—W. H. Hennah

AUDIT OFFICE.

Controller and Auditor-General—J. K. Warburton.
Assistant Controller and Auditor—J. C. Gavin
Chief Clerk—L. C. Roskruge
Clerks—W. Dodd, H. S. Pollen, W. G. Holdsworth, E. J. A. Stevenson, C. M. Georgeson, J. Skerrett
Cadet—J. H. Fowler
Extra Clerks—D. C. Innes, J. Swift, A. E. Bybles, J. Ward, A. A. Bethune, B. A. Meek, C. E. Briggs
Audit Officer, Agent-General's Office, London—C. F. W. Palliser
Audit Inspectors—P. P. Webb, A. H. Maclean, J. King, A. W. Eames, E. T. Greville, G. H. I. Easton, C. P. Johnson, J. T. Dumbell, W. H. Carlyle, H. A. Lamb

REGISTRAR-GENERAL'S OFFICE.

Registrar-General—E. J. Von Dadelszen
Chief Clerk—G. Drury
Clerks—F. H. Machattie, S. Coffey, W. W. Cook.
Cadet—Ben Keys

PRINTING AND STATIONERY DEPARTMENT.

Government Printer, Stationery Office Manager, and Controller of Stamp Printing—John Mackay

Superintending Overseer—J. Burns
Chief Clerk and Accountant—B. B. Allen
Clerk and Computer—N. B. K. Manley
Clerks — F. Barraud, J. W. Hall, R. Watts, A. Stace, A. Williams
Cadet—R. A. Gray
Hansard Supervisor—M. F. Marks
Overseers—J. J. Gamble, B. Wilson
Sub-overseer, Jobbing-room—G. Tattle
Overseer, Machine-room—C. Young
Overseer, Binding Branch—W. Franklin
Sub-overseer, Binding Branch—G. H. Broad
Night Foreman—J. F. Rogers
Stamp Printer—H. Hume
Stereotyper and Electrotyper—W. J. Kirk
Readers—W. Fuller, H. S. Mountier
Forewoman, Binding Branch — Miss Thompson
Engineer—T. R. Barrer

COLONIAL TREASURER'S DEPARTMENT.

Chief Office.

Colonial Treasurer—Hon. R. J. Seddon
Secretary to the Treasury, Receiver-General, Paymaster-General, and Registrar of Consols — James B. Heywood
Accountant to the Treasury—Robert J. Collins
Cashier—C. E. Chittey
Corresponding Clerk—H. Blundell
Clerks—C. Meacham, R. B. Vincent, W. E. Cooper, J. Driscoll, E. L. Mowbray, A. O. Gibbes, J. Holmes, H. N. W. Church, J. Eman Smith, T. H. Burnett, J. Radcliffe, A. J. Morgan, T. J. Davis, F. H. Tuckey
Cadets—W. Wilson, G. A. Fraser
Cadettes—H. L. Hansen, E. Fisher
Officer for Payment of Imperial Pensions at Auckland—B. J. Daveney

Friendly Societies' and Trades Unions' Registry Office; also Office of the Registrar under the Industrial Conciliation and Arbitration Act.

Registrar—E. Mason
Revising Barrister for Friendly Societies and Trades Unions—L. G. Reid
Clerk—C. T. Benzoni

DEPARTMENT OF INDUSTRIES AND COMMERCE.

Minister—Hon. T. Thompson
Clerk—A. M. Smith

LAND AND INCOME TAX DEPARTMENT.

Commissioner—John McGowan
Deputy Commissioner—G. F. C. Campbell
Chief Clerk—F. J. M. D. Walmsley
Accountant—P. Heyes
Clerks—G. Maxwell, H. Nancarrow, A. J. McGowan, J. P. Dugdale, J. M. King, D. R. Purdie, A. F. Oswin, G. W. Jänisch, J. Stevenson, C. V. Kreeft, J. W. Black, A. Clothier, W. M. Tyers, D. G. Clark, T. Oswin, J. R. Smyth, H. L. Wiggins, R. Hepworth, J. J. Hunt, C. de R. Andrews
Draughtsman—H. H. Seed
Cadet—E. Panting

DEPARTMENT OF JUSTICE.

Head Office.

Minister of Justice—Hon. T. Thompson
Under-Secretary—F. Waldegrave
Translator—G. H. Davies
Clerks—C. B. Jordan, C. E. Matthews, W. D. Anderson, G. F. Dixon

Crown Law Office.

Attorney-General—(vacant)
Solicitor-General—W. S. Reid
Assistant Law Officer—L. G. Reid
Law Draftsman — F. Fitchett, M.A., LL.D.
Clerk—E. Y. Redward

Patent Office.

Registrar of Patents, Designs, and Trade-marks—F. Waldegrave
Deputy Registrar—J. C. Lewis
Clerks—M. J. Organ, Mary Eyre

Judicial.

Supreme Court Judges.

Chief Justice—
Wellington—Sir J. Prendergast, Knt.
Puisne Judges—
Wellington—W. B. Edwards
Auckland—E. T. Conolly
Christchurch—J. E. Denniston
Dunedin—J. S. Williams

District Court Judges.

Wairarapa, Wanganui, New Plymouth, Hawera, and Palmerston North—C. C. Kettle
Nelson—H. W. Robinson
Ashburton, Timaru, Oamaru, Queenstown, Naseby, Lawrence, Invercargill, Hokitika, Greymouth, Westport, and Reefton—C. D. R. Ward

Registrars of the Supreme Court.

Auckland—H. C. Brewer
New Plymouth—R. L. Stanford
Wanganui—C. C. Kettle
Napier—A. Turnbull
Gisborne—W. A. Barton
Wellington—D. G. A. Cooper
Nelson—H. W. Robinson
Blenheim—J. Allen
Christchurch—A. R. Bloxam
Hokitika—A. H. King
Dunedin—C. McK. Gordon
Invercargill—F. G. Morgan

Sheriffs.

Auckland—H. C. Brewer
Taranaki—A. H. Holmes
Hawke's Bay—A. Turnbull
Poverty Bay—W. A. Barton
Wellington—D. G. A. Cooper
Wairarapa—W. R. Haselden
Wanganui and Rangitikei—A. D. Thomson
Nelson—W. Heaps
Westland North—E. C. Kelling
Central Westland—H. Lucas
Marlborough—J. B. Stoney
Canterbury—A. R. Bloxam
Timaru—C. A. Wray
Westland—A. H. King
Otago—C. McK. Gordon
Southland—J. R. Colyer

Crown Solicitors.

Auckland—Hon. J. A. Tole
New Plymouth—A. Standish
Gisborne—J. W. Nolan
Napier—A. J. Cotterill
Wellington—H. Gully
Wanganui—S. T. Fitzherbert
Nelson—C. Y. Fell
Blenheim—R. McCallum
Christchurch—T. W. Stringer
Timaru—J. W. White
Hokitika—
Dunedin—B. C. Haggitt
Invercargill—T. M. Macdonald
Oamaru—A. G. Creagh

Crown Prosecutors (District Courts).

New Plymouth—A. Standish
Hawera—E. L. Barton
Wanganui and Palmerston North—S. T. Fitzherbert
Westport and Reefton—C. E. Harden
Hokitika—J. Park
Greymouth—M. Hannan
Timaru—J. W. White
Oamaru—A. G. Creagh
Nelson—C. Y. Fell
Queenstown—Wesley Turton
Invercargill—T. M. Macdonald

Stipendiary Magistrates.

Auckland—H. W. Brabant
Pokeno, Waikato, &c.—T. Jackson
Onehunga, &c.—T. Hutchison*
Russell, &c.—J. S. Clendon
Tauranga, &c.—J. M. Roberts*
Thames, &c.—R. S. Bush*
Gisborne, &c.—J. Booth
New Plymouth—R. L. Stanford
Hawera, &c.—H. W. Northcroft
Wanganui, &c.—C. C. Kettle
Palmerston North, &c.—A. Greenfield
Wellington, &c.—H. Eyre Kenny
Wairarapa, &c.—W. R. Haselden
Napier, &c.—A. Turnbull
Nelson—H. W. Robinson*
Motueka, Collingwood, &c. — Wilson Heaps*
Blenheim, &c.—J. Allen*
Christchurch, &c.—R. Beetham
Kaiapoi, &c.—H. W. Bishop
Timaru, &c.—C. A. Wray
Greymouth, Westport, &c.—H. A. Stratford*
Hokitika, &c.—D. Macfarlane*
Dunedin, &c.—E. H. Carew*
Oamaru, &c.—J. Keddell*
Milton, &c.—R. S. Hawkins*
Clyde, &c.— S. E. McCarthy.*
Naseby—S. M. Dalgleish*
Invercargill, &c.—J. W. Poynton*
Chatham Islands—F. J. W. Gascoyne

Official Assignees in Bankruptcy.

Auckland—J. Lawson, J.P.
Wellington—J. Ashcroft, J.P.
Christchurch—G. L. Greenwood
Dunedin—C. C. Graham, J.P.

Clerks of District and Magistrates' Courts.

New Plymouth—A. H. Holmes
Hawera—A. Trimble

* Are also Wardens of Goldfields.

Wanganui—A. D. Thomson
Palmerston North—W. Matravers
Masterton—F. H. Ibbetson
Nelson—C. H. Webb-Bowen
Hokitika—C. A. Barton
Greymouth—B. Harper
Westport—E. C. Kelling
Reefton—H. Lucas
Timaru—T. Howley
Ashburton—T. W. Taylor
Oamaru—H. H. G. Ralfe
Invercargill—J. R. Colyer
Queenstown—H. N Firth
Lawrence—A. M. Eyes
Naseby—John Terry

Receivers of Gold Revenue, Mining Registrars, and Clerks of Wardens' and Magistrates' Courts.

Thames—J. Jordan
Coromandel—T. M. Lawlor
Paeroa—T. A. Moresby
Te Aroha—J. M. Hickson
Tauranga—J. Thomson
Whangarei—G. M. Robertshaw
Havelock and Cullensville (Marlborough) —J. P. Ward
Nelson—C. H. Webb-Bowen
Motueka—H. E. Gilbert
Collingwood—S. J. Dew
Westport—E. C. Kelling
Charleston—J. P. W. Philpotts
Reefton—H. Lucas
Greymouth—B. Harper
Kumara—J. McEnnis
Hokitika—C. A. Barton
Naseby, &c.—John Terry
Wyndham—D. Bogue
Clyde, Blacks, and Alexandra—F. T. D. Jeffrey
Cromwell—J. Fleming
Queenstown and Arrowtown—H. N. Firth
Lawrence—A. M. Eyes
Riverton—A. A. Mair

Clerks of Magistrates' Courts.

Auckland—F. J. Burgess
Gisborne—W. A. Barton
Hamilton—T. Kirk
Napier—R. B. Mathias
Hastings—P. Skerrett
Marton, &c.—F. M. Deighton
Wellington—W. P. James
Blenheim—J. B. Stoney
Christchurch—W. Martin
Lyttelton—W. Shanaghan
Kaiapoi—M. Lynskey
Dunedin—W. G. P. O'Callaghan

NATIVE LAND COURT.

Chief Judge—G. B. Davy
Judges—A. Mackay, D. Scannell, R. Ward, H. W. Brabant, W. E. Gudgeon, W. J. Butler, H. F. Edger, W. G. Mair, J. A. Wilson, H. D. Johnson, J. M. Batham
Registrars—Auckland, J. W. Browne; Gisborne, J. Brooking; Wellington, E. Buckle

Commissioners of the Native Land Court.

R. S. Bush, J. Booth, A. Turnbull, J. S. Clendon, T. Jackson, C. C. Kettle, J. M. Roberts, W. Stuart, H. W. Bishop, E. H. Carew, F. J. W. Gascoyne, H. E. Kenny, R. L. Stanford, T. Hutchison: Sub-commissioner—J. Brooking
Government Native Agent, Otorohanga —G. T. Wilkinson

VALIDATION COURT.

Chief Judge—G. B. Davy
Judges—The Judges of the Native Land Court
Registrar and Clerk—Gisborne, R. C. Sim; Auckland, J. W. Browne, Wellington, E. Buckle

CORONERS.

Coroners—Auckland, T. M. Philson, H. W. Brabant, T. Hutchison, E. Baker; Akaroa, G. H. Saxton; Blenheim, J. Allen; Christchurch, R. Beetham and H. W. Bishop; Clyde, S. E. McCarthy; Collingwood, E. Davidson; Coromandel, A. R. H. Swindley; Dunedin, E. H. Carew; Foxton, E. S. Thynne; Gisborne, J. Booth; Greymouth, H. A. Stratford; Huntly, T. H. White; Hawera, C. E. Major; Hokitika, D. Macfarlane and R. W. Wade; Invercargill, J. W. Poynton; Lawrence, R. S. Hawkins; Mahurangi, M. Angove; Marton, A. Simpson; Masterton, W. R. Haselden; Napier, A. Turnbull; Naseby, S. M. Dalgleish; Nelson, H. W. Robinson, and L. G. Boor; New Plymouth, R. L. Stanford; Oamaru, J. Keddell; Opotiki, S. Bates; Otahuhu, S. Luke; Otaki, W. H. Simcox; Paeroa, W. Forrest; Palmerston North, A. Greenfield and G. M. Snelson; Pokeno, T. Jackson; Port Albert, J. Shepherd; Pahi, J. B. Ariell; Queenstown, L.

Hotop and S. E. McCarthy; Raglan, W. H. Wallis; Stratford, H. J. C. Coutts; Tauranga, A. C. H. Tovey and J. M. Roberts; Te Awamutu, T. Gresham; Timaru, C. A. Wray; Te Kopuru, T. Webb; Thames, A. Bruce and R. S. Bush; Waimate, E. M. Williams; Waipawa, S. Johnson; Wellington, J. Ashcroft; Wanganui, H. W. Northcroft and C. C. Kettle; Whangarei, J. Bell; Woodville, E. J. Gothard; Chatham Islands, F. J. W. Gascoyne

PRISONS DEPARTMENT.

Inspector—Lieut.-Colonel Arthur Hume, N.Z.M.
Clerk—T. E. Richardson
Gaolers — Auckland, George Sinclair Reston; Dunedin, Samuel Charles Phillips; Hokitika, Michael Flannery; Invercargill, John Henry Bratby; Lyttelton, Matthew Michael Cleary; Napier, Francis Edward Severne; Nelson, Thomas R. Pointon; New Plymouth, Bartholomew Lloyd O'Brien; Wanganui, Robert T. N. Beasley; Wellington, Patrick Samuel Garvey

DEPARTMENT OF LABOUR.

Minister of Labour—Hon. R. J. Seddon
Secretary for Labour and Chief Inspector of Factories—E. Tregear
Chief Clerk—James Mackay
Clerk—F. W. T. Rowley
Cadet—F. A. De la Mare.
Typist—J. W. Collins

INSPECTORS OF FACTORIES.

North Island — J. Mackay, J. Shanaghan, H. Ferguson, L. D. Browett, Margaret Scott, and 71 local Inspectors
South Island—J. Mackay, J. Shanaghan, J. Lomas, H. Maxwell, Margaret Scott, and 68 local Inspectors
(There are also 200 Bureau Agents in different parts of the colony.)

PUBLIC WORKS DEPARTMENT.

HEAD OFFICE.

Minister for Public Works—Hon. W. Hall-Jones.
Under-Secretary—H. J. H. Blow
Engineer-in-Chief—W. H. Hales
Superintending Engineer—P. S. Hay, M.A., M.Inst.C.E.
Chief Clerk—J. A. McArthur
Accountant—G. J. Clapham
Land-purchase Officer—H. Thompson
Record Clerk—H. W. H. Millais
Clerks—W. D. Dumbell, L. F. Tegnér, J. H. Denton, E. McCarthy, J. Williams, H. R. Rae, N. Jacobs, J. H. McAlister, A. S. Lewis, T. J. Gardiner, E. Horneman, F. E. Banks
Chief Draughtsman—W. G. Rutherford
Architectural Draughtsman—J. Campbell
Draughtsmen—T. Perham, E. Jackson, W. Withers, W. G. Swan, J. H. Price
Engineering Cadet—C. J. McKenzie

DISTRICT OFFICES.

District Engineer — Dunedin, E. R. Ussher, M.Inst.C.E.
Resident Engineers — Auckland, C. R. Vickerman; Hunterville, G. L. Cook, M.Inst.C.E.; Wellington, J. A. Wilson; Westport, T. H. Rawson, M.I.C.E.; Greymouth, J. Thomson, B.E.; Hyde, W. A. Shain. In charge of North Island Main Trunk Railway survey, R. W. Holmes
Assistant Engineers—J. D. Louch, A. C. Koch, H. Macandrew, F. M. Hewson, J. J. Hay, M.A., W. H. Gavin, J. W. Richmond, J. S. Stewart, T. Roberts, J. H. Dobson, S. Harding
Engineering Cadets—J. H. Lewis, H. Dickson, J. E. W. McEnnis, F. W. Furkert, A. Jack, J. Meenan, W. A. Jeff, W. Sherratt
Clerks, Draughtsmen, &c.—W. Black, C. T. Rushbrook, C. Wood, J. Young, A. Biddell, W. A. Cumming, E. Sandford, T. Douglas, E. C. Farr, P. F. M. Burrows, W. E. Butler, J. C. Fulton, J. B. Borton, A. R. Stone, E. Waddell, P. S. Waldie, L. M. Shera, A. W. Hamann, A. H. Kimbell

INSPECTION OF MACHINERY BRANCH.

Inspectors of Machinery—Chief Inspector, R. Duncan; Auckland, W. J. Jobson, L. Blackwood; Wellington, H. A. McGregor, P. J. Carman, A. McVicar; Christchurch, G. Croll; Dunedin, A. Morrison, H. Wetherilt
Clerk—R. P. Milne
Cadet—B. Anderson

RAILWAY DEPARTMENT.

Minister for Railways—Hon. A. J. Cadman
General Manager—T. Ronayne
Assistant General Manager—C. Hudson
Chief Clerk—T. W. Waite
Clerks—R. W. McVilly, C. Isherwood, E. J. Andrews, B. M. Wilson, W. Johnston, J. E. Widdop, W. H. Gifford, R. D. Scott, A. J. Will, R. Hope, W. H. Warren
Audit Inspectors—H. Baxter, D. Munro, C. L. Russell
Railway Accountant—A. C. Fife
Clerks—H. Davidson, G. G. Wilson, M. C. Rowe, J. H. Davies, S. P. Curtis, J. McLean, E. Davy, A. Morris, V. Jänisch, E. P. Brogan, C. Batten, W. B. Fisher, J. Firth, E. J. Fleming, E. R. Nicholson, R. J. Loe, F. W. Lash, A. H. Hunt, W. Bourke, W. H. Hales, W. E. Ahern, T. A. O'Connor
Stores Manager—G. Felton
Clerks—A. M. Heaton, F. J. Dawes, J. Webster, J. E. Hasloch, S. Alpe, H. W. Barbor, R. H. Stephens, E. J. Maguiness
District Managers—Kaihu, T. H. Barstow; Auckland, A. Grant; Wanganui, H. Buxton; Napier and Wellington, T. E. Donne; Greymouth, C. A. Piper; Picton, H. B. Dobbie; Nelson, G. E. Richardson; Christchurch, W. H. Gaw; Dunedin, T. Arthur; Invercargill, S. F. Whitcombe
Stationmasters in charge—Kawakawa, R. B. Peat; Whangarei, A. B. Duncan; Westport, T. Hay-Mackenzie
Chief Engineer for Working Railways—J. H. Lowe, M.Inst.C.E.
Inspecting Engineer—J. Coom
Railway Land Officer—E. G. H. Mainwaring
Chief Draughtsman—G. A. Troup
Draughtsmen—J. A. Henderson, J. Besant, W. R. B. Bagge, C. T. Jeffreys, F. C. Widdop
Clerks—W. P. Hicks, G. McCartney, W. S. Ridler, M. Angus, J. T. Ford, W. A. Mirams, H. Jessup, H. W. Rowden, R. S. Kent, E. D. Richards, A. N. Longton
District Engineers—Auckland, C. H. Biss; Wanganui, D. T. McIntosh; Wellington-Napier, J. W. Richmond; Westport, J. D. Harris; Greymouth, H. St. J. Christophers; Christchurch, James Burnett; Dunedin, F. W. MacLean; Invercargill, H. Macandrew
Locomotive Superintendent—T. F. Rotheram
Clerks—R. Triggs, W. H. Butterworth, C. Loveday, F. T. Murison, P. A. Buck, W. B. Sinclair, W. A. Wellings, C. H. Virtue
Chief Draughtsman—G. A. Pearson
Draughtsmen—R. Pye-Smith, E. E. Gillon
Locomotive Engineers—Auckland, A. V. Macdonald; Wanganui-Napier, H. H. Jackson; Wellington, T. A. Peterkin; Hurunui-Bluff, A. L. Beattie

Board of Appeal.

North Island.

H. Eyre Kenny, Stipendiary Magistrate, Chairman, appointed by the Governor.
H. Davidson, Railway Accountant's Office, elected.
T. Wilson, Fireman, elected.

Middle Island.

C. D. R. Ward, District Judge, Chairman, appointed by the Governor.
H. Baxter, Railway Audit Inspector, elected.
D. Handisides, Foreman Carpenter, elected.

POST AND TELEGRAPH DEPARTMENT.

General Post Office.

Postmaster-General and Commissioner of Electric Telegraphs—Hon. R. J. Seddon
Secretary—W. Gray
Superintendent of Electric Lines—J. K. Logan
Assistant Secretary and Inspector—T. Rose
Controller of Money-orders and Savings-banks, and Accountant—G. Gray
Chief Clerk—D. Robertson
Clerks—W. R. Morris, E. V. Senn, F. V. Waters, H. Plimmer, J. C. Williamson, W. Crow, W. Isbister, L. Ledger, V. J. Brogan, W. Callaghan, G. W. Moorhouse, W. Chegwidden, H. S. B. Miller, H. Huggins, G. V. Hudson, F. Perrin, H. D. Grocott, J. Brennan, H. Cornwall, R. J. Thompson, R. E. Hayes, D. A. Jenkins, E.

Fitzsimons, H. N. McLeod, J. C. Redmond, C. B. Harton, W. J. Drake, R. F. Smith, J. D. Avery, A. H. Tucker, J. G. Roache, J. Coyle, F. W. Faber, W. H. Carter, P. Tyrrell, A. T. Markmann, P. Kelleher, W. A. Tanner, H. A. English, G. H. Harris, H. C. Hickson, C. Dempsey, P. D. Hoskins, H. C. Milne, J. G. Howard, W. R. Wakelin, E. Bermingham, C. Bermingham, S. Brock, F. Menzies, E. Harris, B. Kenny, V. Johnston, M. A. McLeod, C. Smith
Electrician—W. C. Smythe
Mechanician—H. F. Smith
Assistant Mechanician—A. W. Macandrew
Storekeeper—J. Black
Assistant Storekeeper—C. B. Mann
Clerk in Store—C. Nicholls
Cadet in Store—F. H. Guinness
Circulation Branch (Post Office)—J. Hoggard, Chief Clerk

INSPECTORS OF TELEGRAPHS.

Auckland—E. H. Bold
Christchurch—W. G. Meddings
Dunedin—J. Orchiston

ASSISTANT INSPECTORS OF POST OFFICES.

D. Cumming, C. J. A. Tipping, S. P. Stevens

SUB-INSPECTOR OF TELEGRAPHS.

Nelson—J. W. Gannaway

CHIEF POSTMASTERS.

Auckland—S. B. Biss
*Thames—J. E. Coney
*Gisborne—G. W. Sampson
Napier—S. J. Jago
*New Plymouth—F. D. Holdsworth
*Wanganui—J. F. McBeth
*Blenheim—J. Bull
*Nelson—H. Calders
*Westport—J. H. Sheath
*Greymouth—C. J. Berry
*Hokitika—A. E. Cresswell
Christchurch—R. Kirton
*Timaru—J. A. Hutton
*Oamaru—W. W. Beswick
Dunedin—E. Cook
*Invercargill—J. W. Wilkin

*These are combined post- and telegraph-offices.

OFFICERS IN CHARGE OF TELEGRAPH OFFICES.

Auckland—W. S. Furby
Napier—H. W. Harrington
Wellington—C. C. Robertson
Christchurch—J. W. Mason
Dunedin—J. G. Ballard

BOARD OF APPEAL.

J. McGowan, Commissioner of Taxes, Chairman (by Act).
J. K. Logan, Superintendent of Electric Lines (by Act).
J. H. Stevens, Representing Postal Branch, elected.
W. McNickle, Representing Telegraph Branch, elected.

DEPARTMENT OF TRADE AND CUSTOMS.

Commissioner of Trade and Customs—Hon. R. J. Seddon.
Secretary and Inspector of Customs and Secretary of Marine—W. T. Glasgow.
Chief Clerk—T. Larchin
Clerks, Customs—H. J. Marsh, P. Doull.
Audit—H. W. Brewer, H. Crowther (Writer)

COLLECTORS OF CUSTOMS.

Auckland—A. Rose
Poverty Bay—E. Pasley
New Plymouth—H. Bedford
Napier—E. R. C. Bowen
Wellington—D. McKellar
Wanganui—A. Elliott
Wairau—A. Carter
Nelson—W. Heaps
Westport—J. Mills
Greymouth—A. McDowell
Hokitika—E. Chilman
Lyttelton and Christchurch—E. Patten
Timaru—A. Hart
Oamaru—J. P. Ridings
Dunedin—C. W. S. Chamberlain
Invercargill and Bluff Harbour—D. Johnston, jun.

OFFICERS IN CHARGE OF PORTS, AND COASTWAITERS.

Thames—T. C. Bayldon, Coastwaiter
Russell—H. Stephenson, Coastwaiter
Tauranga—E. Northcroft, Officer in Charge
Whangaroa—A. G. Ratcliffe, Coastwaiter
Whangarei—J. Munro, Coastwaiter

Mongonui — A. D. Clemett, Officer in Charge
Hokianga—G. Martin, Coastwaiter
Kaipara—J. C. Smith, Officer in Charge
Waitara—J. Cameron, Coastwaiter
Foxton—J. B. Imrie, Officer in Charge
Patea—J. W. Glenny, Officer in Charge
Picton—F. Teesdale, Officer in Charge
Chatham Islands—F. J. W. Gascoyne, Officer in Charge

MARINE DEPARTMENT.

Minister of Marine—Hon. W. Hall-Jones
Secretary—W. T. Glasgow
Chief Clerk—G. Allport
Clerk—J. J. D. Grix
Cadet—G. Sinclair
Marine Engineer for the Colony—W. H. Hales.
Nautical Adviser and Chief Examiner of Masters and Mates—G. Allman
Examiner of Masters and Mates—Wellington, R. A. Edwin, Com. R.N.
Weather Reporter—R. A. Edwin, Com. R.N.
Examiners of Masters and Mates, Auckland—T. C. Tilly and J. Robertson
Examiner of Masters and Mates, Lyttelton—J. A. H. Marciel
Examiner of Masters and Mates, Dunedin—W. J. Grey
Engineer Surveyors and Examiners of Engineers, Auckland—W. J. Jobson and L. Blackwood
Engineer Surveyors and Examiners of Engineers, Wellington—R. Duncan (Principal), H. A. McGregor, P. Carman, and A. McVicar
Engineer Surveyor and Examiner of Engineers, Christchurch—G. Croll
Engineer Surveyors and Examiners of Engineers, Dunedin—A. Morrison and H. Wetherilt.
Master of s.s. Tutanekai—J. Fairchild
Master of s.s. Hinemoa—J. Neale

INSPECTORS OF SEA FISHERIES.

Russell—H. Stephenson
Whangarei—J. Munro
Wellington—F. Moorhouse
Hokitika—J. Duncan
Bluff—P. McGrath

HARBOURMASTERS.*

Collingwood—J. E. Fletcher
Foxton—A. Seabury
Hokianga—G. Martin
Russell—H. Stephenson
Kaipara—J. Christy Smith
Manukau—J. Robertson
Nelson—F. W. Cox
Okarito—G. Thomson
Picton—A. Duncan
Port Robinson—J. Sinclair
Waitapu—S. G. Robinson

* The more important harbours are controlled by local Boards, not by the Marine Department.

STAMP DEPARTMENT.

Commissioner of Stamp Duties—Hon. Jas. Carroll
Secretary for Stamps—C. A. St. G. Hickson
Chief Clerk and Accountant—H. O. Williams
Custodian and Issuer of Stamps—W. H. Shore
Record and Receiving Clerk—J. P. Murphy
Clerk—J. Murray
Chief Stamper—C. Howe
Cadet—E. A. Morling

DEPUTY COMMISSIONERS OF STAMPS.

Auckland—E. Bamford
Gisborne—J. M. Batham
Taranaki—R. L. Stanford
Hawke's Bay—Thos. Hall
Wellington—C. A. St. G. Hickson
Wanganui—J. F. McBeth
Nelson—W. W. de Castro
Marlborough—A. V. Sturtevant
Canterbury—E. Denham
Timaru—J. A. Hutton
Otago—P. C. Corliss
Southland—F. G. Morgan
Westland—A. H. King

LAND TRANSFER DEPARTMENT AND DEEDS REGISTRY.

Registrar-General of Land and Deeds—G. B. Davy
Secretary, Land and Deeds—C. A. St. G. Hickson

DISTRICT LAND REGISTRARS AND REGISTRARS OF DEEDS.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Wellington—Wm. Stuart
Hawke's Bay—Thos. Hall
Gisborne—J. M. Batham
Nelson—H. W. Robinson

Marlborough—J. Allen
Canterbury—G. G. Bridges and E. Denham
Otago—H. Turton
Southland—F. G. Morgan
Westland—A. H. King

Examiners of Titles.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Wellington—Wm. Stuart, H. Howorth
Hawke's Bay—Thos. Hall
Gisborne—J. M. Batham
Nelson—H. W. Robinson
Marlborough—Wm. Stuart
Canterbury—G. G. Bridges
Otago—H. Turton
Southland—F. G. Morgan
Westland—A. H. King

Registrar of Joint-stock Companies.

C. A. St. G. Hickson

Registrars of Building Societies, Industrial and Provident Societies, and Assistant Registrars of Joint-stock Companies.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Hawke's Bay—Thos. Hall
Wellington—H. O. Williams
Nelson—W. W. de Castro
Marlborough—A. V. Sturtevant
Canterbury—E. Denham
Otago—P. C. Corliss
Southland—F. G. Morgan
Westland—A. H. King

EDUCATION DEPARTMENT.

Minister of Education (administering also Native schools, industrial schools, and the institution for deaf-mutes)—Hon. W. C. Walker
Secretary for Education and Inspector-General of Schools—Rev. W. J. Habens, B.A.
Chief Clerk—Sir E. O. Gibbes, Bart.
Clerks—F. K. de Castro, H. B. Kirk, M.A., R. H. Pope, F. L. Severne, E. C. Banks, F. D. Thomson
Inspector of Native Schools—James H. Pope. Assistant Inspector—H. B. Kirk, M.A.

Education Boards.

Auckland—V. E. Rice, Secretary
Taranaki—E. Veale, Secretary
Wanganui—A. A. Browne, Secretary
Wellington—A. Dorset, Secretary
Hawke's Bay—G. T. Fannin, Secretary
Marlborough—J. Smith, Secretary
Nelson—S. Ellis, Secretary
Grey—W. Riemenschneider, Secretary
Westland—A. J. Morton, B.A., Secretary
Canterbury North—H. C. Lane, Secretary
Canterbury South—J. H. Bamfield, Secretary
Otago—P. G. Pryde, Secretary
Southland—J. Neill, Secretary

School Commissioners

(*Administrators of Education Reserves*).

Auckland—H. N. Garland, Secretary
Taranaki—E. Veale, Secretary
Wellington—N. J. Tone, Secretary
Hawke's Bay—E. P. A. Platford, Secretary
Marlborough—J. Smith, Secretary
Nelson—A. T. Jones, Secretary
Westland—A. J. Morton, Secretary
Canterbury—H. H. Pitman, Steward of Reserves
Otago—C. Macandrew, Secretary

Industrial Schools.

Government Schools.

Auckland Industrial School—Miss S. E. Jackson, Manager
Burnham Industrial School (Canterbury)—T. Palethorpe, Manager
Caversham Industrial School (Otago)—G. M. Burlinson, Manager

Private Schools.

St. Mary's Industrial School, Ponsonby—Right Rev. Bishop Lenihan, Manager
St. Joseph's Industrial School, Wellington—Rev. T. G. Dawson, Manager
St. Mary's Industrial School, Nelson—Rev. W. J. Mahoney, Manager

Institution for Deaf-mutes, Sumner.

Director—G. van Asch
Steward—H. Buttle

LUNATIC ASYLUMS.

Inspector—Duncan MacGregor, M.A., M.B., C.M.
Deputy Inspector—Mrs. Grace Neill
Medical Superintendent, Auckland Asylum—R. M. Beattie, M.B.
Medical Superintendent, Christchurch Asylum—E. G. Levinge, M.B.
Medical Superintendent, Wellington and Porirua Asylums—Gray Hassell, M.D.
Medical Superintendent, Seacliff Asylum—F. Truby King, M.B.
Superintendent, Hokitika Asylum—H. Gribben
Superintendent, Nelson Asylum—J. Morrison
Ashburn Hall, Waikari (private asylum)—Proprietors, Dr. Alexander and Executor of James Hume; Medical Officer, Frank Hay, M.B.

MINES DEPARTMENT.

Chief Office.

Minister of Mines—Hon. A. J. Cadman
Under-Secretary for Mines—H. J. H. Eliott
Inspecting Engineer—George Wilson
Chief Clerk—T. H. Hamer
Clerks—T. S. M. Cowie, H. E. Radcliffe
Analyst—W. Skey
Geologist—Alexander McKay, F.G.S.
Assistant Geologist—W. A. McKay
Draughtsman—C. H. Pierard
Cadet—J. T. Watkins

Inspectors of Mines.

Thames and Auckland Districts—James Coutts; Assistant Inspector, Thomas Ryan; Canterbury, Dunedin, and Southland Districts—J. Hayes (Acting); West Coast Districts—N. D. Cochrane

Mining Bureau.

Secretary—P. Galvin

Managers of Water-races.

Waimea-Kumara—A. Aitken
Mount Ida—R. Murray

Schools of Mines.

Lecturers and Instructors: Thames—F. B. Allen, M.A., B.Sc.; Reefton—R. M. Aitken

Board of Examiners under "The Coal-mines Act, 1891."

The Director of the Geological Survey of New Zealand; the Surveyor-General; the Inspecting Engineer of Mines; the Chief Inspector of Machinery, Wellington; James Bishop, of Brunnerton; Thomas Brown, of Denniston; and William Shore, of Kaitangata

Board of Examiners under "The Mining Act, 1891."

Same official members as above Board, with the following private members: H. A. Gordon and Thomas Dunlop, of the Thames; Patrick Quirk Caples, of Reefton, and Francis Hodge, of Coromandel.
The Director of the Geological Survey of New Zealand is Chairman of both Boards, and Mr. T. H. Hamer is the Secretary.

Geological Survey, Museum, and Observatories.

Minister in Charge—The Hon. Minister of Mines
Director—Sir J. Hector, K.C.M.G., M.D., F.R.S.
Clerk, Curator, and Meteorological Observer for Wellington—R. B. Gore
Astronomical Observer—T. King
Meteorological Observer, Auckland—T. F. Cheeseman, F.L.S.
Meteorological Observer, Dunedin—H. Skey
Meteorological Observer, New Plymouth—E. Veale
Meteorological Observer, Hokitika—A. D. Macfarlane

New Zealand Institute.

Manager—Sir J. Hector, K.C.M.G., M.D., F.R.S.
Hon. Treasurer—W. T. L. Travers, F.L.S.
Secretary—R. B. Gore

DEFENCE DEPARTMENT.

Minister of Defence—Hon. T. Thompson
Under-Secretary—Major Sir A. P. Douglas, Bart., late R.N.

Commander of the N.Z. Forces.

Colonel Arthur Pole Penton, R.A.

Staff-officer to the Commander of the N.Z. Forces.

Major Wm. Roberts Napier Madocks, N.Z.M. (Lieutenant R.A.)
Clerk—T. F. Grey

HARBOUR DEFENCE.

Chief Engineer—W. H. Hales

Defence Store Department.

Storekeeper—Capt. S. C. Anderson.
Assistant Storekeeper—T. H. Sewell
Clerk—J. O'Sullivan

NEW ZEALAND PERMANENT MILITIA.

No. 1 Service Coy.

Major W. B. Messenger
Captain H. C. Morrison
Captain J. Coleman
Lieutenant J. E. Hume

Inspector of Submarine Mining Establishment.

Captain J. Falconer

No. 2 Service Coy.

Captain J. Falconer
Captain W. T. Powell

Quartermaster, Permanent Militia.

Captain S. C. Anderson

Surgeon, Permanent Militia (Wellington).

John Teare, M.B.

Surgeon, Permanent Militia (Auckland).

John Wilkins, M.R.C.S.E.

Honorary Surgeon, Permanent Militia.

Patrick J. O'Neill O'Carroll

Honorary Chaplain, Lyttelton Detachment Permanent Militia.

The Rev. E. E. Chambers

Honorary Chaplain, Wellington Detachment Permanent Militia.

The Rev. W. C. Waters, M.A.

Officers Commanding Militia and Volunteer Districts, and Adjutants.

Auckland — (Temporary) Lieut.-Colonel Joseph Henry Banks, N.Z.M. (late Major H.M. 7th Dragoon Guards, &c.). Acting Adjutant: Lieut. John Grant, N.Z. Vols.
Wellington — Lieut.-Colonel Stuart Newall, N.Z.M.
Canterbury—Lieut.-Colonel Henry Gordon, N.Z.M., late H.M. 44th Foot
North Otago—V.D. Major Alfred Headland
South Otago—Lieut.-Colonel William Holden Webb, N.Z.M., late H.M. 109th Foot
Southland—
Nelson—V.D. Lieut.-Colonel Albert Pitt, N.Z.M. Adjutant: Wm S. Littlejohn (Captain, Nelson College Cadets)

NEW ZEALAND POLICE FORCE.

Head Office.

Commissioner — Lieutenant-Colonel A. Hume
Clerks—John Evans, John Tasker

Police Department.

Inspectors, 1st Class—Thomas Broham, Peter Pender, William Stone Pardy, John Emerson, James Hickson, Francis McGovern
Inspector, 3rd Class—John Pratt

DEPARTMENT OF LANDS AND SURVEY.

HEAD OFFICE.

Minister of Lands—Hon. John McKenzie
Surveyor-General and Secretary for Crown Lands—S. Percy Smith, F.R.G.S.
Assistant Surveyor-General and Under-Secretary for Crown Lands—Alexander Barron
Chief Draughtsman—F. W. Flanagan
Chief Clerk—W. S. Short
Chief Accountant—H. J. Knowles
Auditor of Land Revenue—W. G. Runcie
Superintendent of Village-settlements—J. E. March

AUCKLAND DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—G. J. Mueller
District Surveyors—L. Cussen, J. Baber, jun., G. A. Martin
Assistant Surveyors—A. H. Vickerman, H. D. M. Haszard, T. K. Thompson, R. S. Galbraith, D. Innes Barron

Road Surveyors—C. W. Hursthouse, A. B. Wright, R. H. Reaney
Chief Draughtsman—W. C. Kensington
Receiver of Land Revenue — T. M. Taylor

HAWKE'S BAY DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—E. C. Gold-Smith (also District Land Officer, Gisborne)
District Surveyors — L. Smith, James Hay
Assistant Surveyor—J. Mouat
Chief Draughtsman—F. Simpson
Receiver of Land Revenue—F. Bull

TARANAKI DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—J. Strauchon
District Surveyors—H. M. Skeet, G. H. Bullard
Assistant-Surveyors—J. F. Frith, W. T. Morpeth
Road Surveyor—G. F. Robinson
Chief Draughtsman—F. E. Clarke
Receiver of Land Revenue—G. P. Doile

WELLINGTON DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—J. W. A. Marchant
District Surveyors—J. D. Climie, F. A. Thompson
Assistant Surveyors—H. J. Lowe, P. A. Dalziel, J. McKay, J. G. Littlejohn, H. Maitland
Road Surveyors—G. T. Murray, A. C. Turner
Chief Draughtsman—J. McKenzie
Receiver of Land Revenue (Acting)—T. G. Waitt

NELSON DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—T. Humphries
District Surveyors—J. A. Montgomerie, J. Snodgrass, R. T. Sadd
Assistant Surveyor—J. D. Thomson
Chief Draughtsman—H. Trent
Receiver of Land Revenue—J. T. Catley
Caretaker, Hanmer Springs Sanatorium —J. Rogers

MARLBOROUGH DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—C. W. Adams
District Surveyors—F. S. Smith, D. W. Gillies, E. W. Buckeridge
Chief Draughtsman and Receiver of Land Revenue—G. Robinson

WESTLAND DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—W. G. Murray
Assistant Surveyor—W. Wilson
Road Surveyor—F. B. Wither
Chief Draughtsman and Receiver of Land Revenue—G. J. Roberts

CANTERBURY DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—S. Weetman
District Surveyors—T. N. Broderick, G. H. M. McClure, L. O. Mathias
Chief Draughtsman—C. B. Shanks
Receiver of Land Revenue—A. A. McNab

OTAGO DISTRICT.

Commissioner of Crown Lands — J. P. Maitland
Chief Surveyor—John Hay
District Surveyors—J. Langmuir, E. H. Wilmot, D. M. Calder
Assistant Surveyors—W. D. R. McCurdie, W. T. Neill
Chief Draughtsman—P. Treseder
Receiver of Land Revenue—G. A. Reade

SOUTHLAND DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—David Barron
Assistant Surveyor—A. Hodgkinson
Chief Draughtsman—J. G. Clare
Receiver of Land Revenue—H. L. Welch

LAND FOR SETTLEMENTS BRANCH.

Land Purchase Inspector—James McKerrow, F.A.S.

MEMBERS OF LAND BOARDS.

Auckland—G. Mueller, R. Thompson, B. Harris, D. Lundon, J. Renshaw
Hawke's Bay — E. C. Gold-Smith, C. Hall, T. Hyde, R. R. Groom, G. Mathewson
Taranaki—J. Strauchon, T. Kelly, C. K. Stock, J. Heslop
Wellington—J. W. A. Marchant, A. W. Hogg, J. Stevens, H. A. Field
Nelson—Thomas Humphries, J. Kerr, D. Bate, F. Hamilton
Marlborough—C. W. Adams, A. P. Seymour, C. H. Mills, J. Redwood, J. A. Parsons
Westland—W. G. Murray, A. Matheson, J. Chesney, J. S. Lang
Canterbury—S. Weetman, A. C. Pringle, R. Meredith, D. McMillan, J. McLachlan

Otago—J. P. Maitland, A. McKerrow, H. Clark, J. Duncan, W. Dallas
Southland—David Barron, A. Kinross, J. McIntyre, A. Baldey, D. King

DEPARTMENT OF AGRICULTURE.

Chief Office.

Minister in Charge—Hon. J. McKenzie
Secretary of Agriculture and Chief Inspector of Stock—John D. Ritchie
Assistant Chief Inspector of Stock—T. A. Fraser
Chief Clerk—Richard Evatt
Clerk and Biologist—T. W. Kirk, F.L.S.
Assistant Entomologist at Auckland—Thomas Broun, F.E.S.
Veterinary Surgeons—J. A. Gilruth, M.R.C.V.S.; Archibald Park, M.R.C.V.S.; C. J. Reakes, M.R.C.V.S.
Produce Commissioner, London—Office vacant.
Dairy Commissioner—
Dairy Instructors and Graders—James Sawers, J. T. Lang, C. W. Sorensen, A. A. Thornton
Pomologists — W. J. Palmer, J. C. Blackmore, Joseph Mayo
Poultry Expert—J. A. Henderson

Inspectors of Stock.

Auckland—E. Clifton (in charge), F. Schaw, Auckland; G. S. Cooke, Whangarei; D. Ross, Hamilton; H. E. Collett, Whakatane
Napier—J. Drummond (in charge), H. Oldham, Napier; C. Thomson, Gisborne; W. R. Rutherfurd, Wairoa; J. Harvey, Woodville
Wairarapa—W. Miller, Masterton; D. Kerr, Carterton
Wellington—W. G. Rees, Wellington
West Coast—A. K. Blundell (in charge), Wanganui; F. E. Orbell, Hawera; H. G. J. Hull, Palmerston North
Nelson—H. M. Campbell, Nelson (in charge); J. A. Easton, Foxhill
Marlborough—John Moore, Blenheim
Westland—V. A. Huddleston, Hokitika
Canterbury-Kaikoura—R. F. Holderness (in charge), E. A. Dowden, Christchurch; C. A. Cunningham, Rangiora; J. C. Huddleston, Rotherham; Blair Fullarton, Ashburton
South Canterbury—G. H. Jenkinson, Timaru; J. W. Deem, Fairlie; R. H. Hassall, Kurow
Otago—J. E. Thomson, Dunedin; J. S. Nichol, Outram; J. C. Miller, Oamaru; J. L. Bruce, Balclutha; A. Ironside, Clyde; R. I. Gossage, Naseby; C. C. Empson, Lawrence; James Duncan, Palmerston; E. A. Field, Gore; H. T. Turner, Invercargill; J. W. Raymond, Bluff

VALUATION DEPARTMENT.

Valuer General—John McGowan
Chief Valuers—Auckland, W. Duncan; Wanganui, A. Barns; Wellington, T. K. Macdonald; Canterbury, A. P. O'Callaghan; Otago, A. McKerrow; Southland, H. Carswell

GOVERNMENT LIFE INSURANCE DEPARTMENT.

Commissioner—J. H. Richardson, F.F.A.
Assistant Commissioner—D. M. Luckie, F.S.S.
Actuary—Morris Fox
Secretary—W. B. Hudson
Chief Medical Officer—T. Cahill, M.D.
Accountant—G. W. Barltrop
Assistant Actuary—G. Leslie
Chief Clerk—R. C. Niven
Office Examiner—G. A. Kennedy
Second Assistant Actuary—P. Muter
Clerks—J. C. Young, J. W. Kinniburgh, D. J. McG. McKenzie, W. S. Smith, A. H. Hamerton, F. B. Bolt, C. E. Galwey, T. L. Barker, A. L. B. Jordan, H. Spackman, G. Webb, R. T. Smith, C. J. Alexander, J. A. Thomson, F. K. Kelling, H. S. Manning, C. W. Palmer, J. B. Young, A. Avery, G. C. Fache, A. W. G. Burnes, F. W. Beale, A. de Castro, F. M. Leckie, R. P. Hood, G. A. N. Campbell, W. H. Woon, S. P. Hawthorne, A. T. Traversi, J. G. Reid, H. A. Parker, C. H. E. Stichbury, J. R. Samson, H. H. Henderson, R. Fullerton
Chief Messenger—W. Archer

AUCKLAND AGENCY.

District Manager—W. J. Speight
Chief Clerk—J. K. Blenkhorn
Clerk—J. B. Watkis

NAPIER AGENCY.

Resident Agent—J. H. Dean

WANGANUI AGENCY.

Resident Agent—J. Fairburn

WELLINGTON AGENCY.

District Manager—G. Robertson
Chief Clerk—M. J. K. Heywood
Clerk, W. C. Marchant

NELSON AGENCY.

Resident Agent—A. P. Burnes

BLENHEIM AGENCY.

Agency Clerk—C. H. Ralph

GREYMOUTH AGENCY.

Resident Agent—A. E. Allison

CHRISTCHURCH AGENCY.

District Manager—J. C. Prudhoe
Chief Clerk—J. W. H. Wood
Clerks—H. Rose and G. J. Robertson.

TIMARU AGENCY.

Agency Clerk—S. T. Wicksteed

OAMARU AGENCY.

Resident Agent—O. H. Pinel

DUNEDIN AGENCY.

District Manager—R. S. McGowan
Chief Clerk—G. Crichton
Clerk—A. Marryatt

INVERCARGILL AGENCY.

Agency Clerk—J. Findlay

PUBLIC TRUST OFFICE.

Public Trustee—J. C. Martin
Deputy Public Trustee—A. A. Duncan
Solicitor—F. J. Wilson
Chief Clerk—T. S. Ronaldson
Accountant—M. C. Barnett
Clerk in Charge of Wills, Trusts, &c.—T. Stephens
Examiner—M. Townsend
Clerks—P. Fair, C. Zachariah, P. Hervey, E. C. Reeves, W. A. Fordham, H. Oswin, A. Purdie, G. A. Smyth, A. J. Cross, T. R. Saywell, N. Levien, W. McGowan, M. E. Harrap, S. Dimant, E. A. Smythe, W. Barr, E. O. Hales, C. Morris, S. W. Smith, C. A. Goldsmith, W. Campbell, R. Price, H. Masters
District Agent, Christchurch—J. J. M. Hamilton; Clerk, J. Allen
District Agent, Auckland—E. F. Warren; Clerk, E. Holloway; Cadet, K. N. H. Browne
District Agent, Dunedin—F. H. Morice; Typist, F. Naphtali; Cadet, J. B. Jack
District Agent, Greymouth—T. D. Kendall
District Agent, Napier—E. P. Watkis
West Coast Settlement Reserves Agent—Thomas W. Fisher; Clerk, E. G. Hyde

ADVANCES TO SETTLERS OFFICE.

Superintendent—John McGowan
Deputy Superintendent—G. F. C. Campbell
Head Office, Chief Clerk—F. J. M. D. Walmsley
Clerks—E. McFadden, W. Waddel, T. C. Somers, W. M. Smith, A. Prichard, C. Wilson, T. W. Foote, H. Redmond, M. J. Crombie, C. B. Collins, D. Fraser
Clerks at Agencies—A. Millar, J. Ferguson, F. B. Robertson

ECCLESIASTICAL.

THERE is no State Church in the colony, nor is State aid given to any form of religion. Government in the early days set aside certain lands as endowments for various religious bodies, but nothing of the kind has been done for many years past.

CHURCH OF THE PROVINCE OF NEW ZEALAND, COMMONLY CALLED THE "CHURCH OF ENGLAND."

Bishops.

The Most Rev. William Garden Cowie, D.D., Auckland; consecrated 1869 (Primate).

The Right Rev. William Leonard Williams, B.A., Waiapu; consecrated 1895.

The Right Rev. Frederic Wallis, D.D., Wellington; consecrated 1895.

The Right Rev. Charles Oliver Mules, M.A., Nelson; consecrated 1892.

The Right Rev. Churchill Julius, D.D., Christchurch; consecrated 1890.

The Right Rev. Samuel Tarratt Nevill, D.D., Dunedin; consecrated 1871.

The Right Rev. Cecil Wilson, M.A., Melanesia; consecrated 1894.

ROMAN CATHOLIC CHURCH.

Archbishop.

The Most Rev. Francis Redwood, S.M., D.D., Archbishop and Metropolitan, Wellington; consecrated 1874.

Bishops.

The Right Rev. George Michael Lenihan, D.D., Auckland; consecrated 1896.

The Right Rev. John Joseph Grimes, S.M., D.D., Christchurch; consecrated 1887.

The Right Rev. Michael Verdon, D.D., Dunedin; consecrated 1896.

ANNUAL MEETINGS AND OFFICERS.

The principal present heads or officers of the various churches, and the places and times of holding the annual or periodical assemblies or meetings, are as follow:—

Church of England.—For Church purposes, the colony is divided into six dioceses—viz., Auckland, Waiapu, Wellington, Nelson,

Christchurch, and Dunedin. The General Synod meets every third year in one or other of the dioceses. — President, the Bishop of Auckland, Primate; Secretary, Rev. J. P. Kempthorne, Nelson; Lay Secretary, James Allen, Esq., B.A., M.H.R., Dunedin. The Diocesan Synods meet once a year, under the presidency of the Bishop of the diocese. The next General Synod will be held in Christchurch, in February, 1898.

Roman Catholic Church.—The diocese of Wellington, established in 1848, was in 1887 created the metropolitan see. There are three suffragan dioceses—Auckland, Christchurch, and Dunedin. A Retreat is held annually in each of the four dioceses, at the end of which a Synod is held, presided over by the Bishop, and at which all his clergy attend.

Presbyterian Church of New Zealand.—The Assembly meets annually, in February, at Auckland, Wellington, and Christchurch, in succession. Moderator, the Very Rev. Robert Erwin, D.D.; Clerk and Treasurer, Rev. David Sidey, D.D., Napier.

Presbyterian Church of Otago and Southland. — The Synod meets annually in October at Dunedin. Moderator, Rev. J. Lothian, Alexandra South; Clerk, Rev. W. Bannerman, Roslyn, Dunedin; Church Factor, Mr. Frederick Smith, High Street, Dunedin. Theological Professors, Rev. John Dunlop, M.A., D.D., and Rev. Michael Watt, M.A., D.D. Mr. James Dunbar, Tutor in Greek.

Wesleyan Methodist Church.—The annual Conference meets on or about the 1st March, the exact date being determined by the President, who holds office for one year. Each Conference determines where the next one shall assemble. President (1897–98), Rev. P. W. Fairclough, Kaiapoi; Secretary, Rev. D. J. Murray, Lyttelton. The next Conference is to meet in Trinity Church, Dunedin. [The legal union of the United Methodist Free Churches and the Bible Christian Connexion with the Wesleyan Methodist Church took effect on Monday, 13th April, 1896. The ministers of the two amalgamated denominations are now returned amongst the Wesleyan Methodists, and all the offices cease to exist, with the exception of that held by the Rev. J. Orchard, who still continues to represent the English Conference of the Bible Christian Church.]

Primitive Methodists.—A Conference takes place every January. The next is to be held in Dunedin, commencing 7th January, 1898. The Executive Committee of the Church sits in Auckland. The Conference officials for the present year are: President, Rev. Thomas H. Lyon, 167, Cambridge Terrace, Christchurch; Secretary, Rev. Henry Williams, Geraldine, Canterbury; Secretary of Executive Committee, Mr. D. Goldie, Auckland.

Baptist Union of New Zealand.—President, Rev. J. J. Doke, Christchurch; Treasurer, Mr. J. Tonson Garlick, Queen Street,

Auckland; Secretary, Rev. A. H. Collins, Auckland. The Union comprises 31 churches, 3,185 members, 5,055 scholars in the Sunday schools, with 583 teachers. There are also 89 local preachers, and 22 preaching-stations. This religious body has a newspaper of its own—the *New Zealand Baptist*—published in Christchurch; Editor, Rev. Arthur Dewdney, Oamaru.

Congregational Union of New Zealand.—The annual meetings are held during the second week of February, at such place as may be decided on by vote of the Council. Chairman for 1897, Mr. W. H. Lyon, Auckland; Secretary, Rev. B. Rhodes, Onehunga; Treasurer, Mr. W. H. Lyon, Auckland; Registrar, Rev. A. H. Wallace, Gore; Head Office, Auckland. In 1898 the meeting of the Council will be held at Auckland. The Executive Committee of the Union meets in Auckland on the second Tuesday of each month.

Hebrews.—Ministers: Rev. S. A. Goldstein, Auckland; Rev. Louis J. Harrison, Dunedin; Rev. H. van Staveren, Wellington; Mr. Alexander Singer, Hokitika. Annual meetings of the general Congregations are held at these places on the third Sunday in Elul (about the end of August).

JUDICIAL.

THE Minister of Justice is charged with all matters relating to the Supreme, District, Magistrates', and Wardens' Courts, Crown Law Office, Coroners, patents, designs, and trade-marks, bankruptcy, criminal prosecutions in the higher Courts, Justices of the Peace, Licensing Committees, and prisons. The Supreme Court is presided over by a Chief Justice and four Puisne Judges. The Chief Justice and one Puisne Judge reside in Wellington, one Judge resides at Auckland, one at Christchurch, and one at Dunedin. They all go on circuit periodically within their districts. Circuit sittings of the Supreme Court are held at fourteen places. There are three District Court Judges, holding Courts at seventeen towns. At nearly every town in which sittings of the Supreme or District Courts are held there is a Crown Prosecutor, paid by fees, and a Sheriff. In the District Courts the Crown Prosecutor exercises the function of a Grand Jury.

The Magistrates' Courts are presided over by twenty-eight Stipendiary Magistrates, and Courts are held daily in the principal centres, and at convenient times in the smaller towns. The jurisdiction of these Courts may be "ordinary" (which includes, practically speaking, all claims not exceeding £100 in value, except claims for damages for false imprisonment or illegal arrest, malicious prosecu-

tion, libel, slander, seduction, or breach of promise of marriage); "extended," under which money-claims to an amount not exceeding £200 may be entertained; and "special," which, while including all the powers of the "extended" jurisdiction, enables the Court to deal also with partnerships, injunctions, and other equity suits. At present twenty-seven of the Stipendiary Magistrates exercise the "extended" jurisdiction, but none the "special." When, however, owing to increase of settlement, or pressure of business in the Supreme Court, necessity arises, the power to exercise either the extended or special jurisdiction can be conferred by Order in Council on any Court. The Magistrates exercising the special jurisdiction must be barristers or solicitors.

The procedure of the Courts is remarkably simple, no pleadings being required beyond a statement by the plaintiff sufficient to inform the defendant of the nature and extent of the claim. Due provision is made for counter-claims, and the joinder at any stage of the proceedings of all necessary parties, so that all questions arising in connection with the subject-matter before the Court may be finally dealt with at once. Appeal to the Supreme Court is allowed on points of law, and of law only, in cases where not more than £50 is concerned, and on points of either law or fact in cases above that amount. Generally, the procedure is so simple and elastic that in the majority of cases heard it is not necessary to retain the services of a professional man, but, where solicitors are employed, the Court in its judgment settles the costs to be paid according to a prescribed scale. In places where there is not a Magistrate's Court Justices of the Peace have power to hold a Court and deal with claims not exceeding £20 in value, giving judgment "according to equity and good conscience."

In criminal cases the Supreme or District Court may reserve any question of law for the Court of Appeal; and, if the Court refuse to reserve a question, the Attorney-General may give leave to move the Court of Appeal for leave to appeal.

The Supreme Court may give leave to any person convicted before it to apply to the Court of Appeal for a new trial on the ground that the verdict was against the weight of evidence, and the Court of Appeal may direct a new trial. In cases where the clemency of the Crown is sought, the Governor in Council, if he entertains a doubt whether the convicted person ought to have been convicted, may direct a new trial at such time and before such Court as he may think proper.

Fourteen of the Magistrates are also Wardens, holding Wardens' Courts in the various goldfields. There are forty-eight civilian Clerks of Courts, and eighty-six who are also police sergeants or constables.

Every Stipendiary Magistrate holds the office of Coroner, and is paid 10s. 6d. for each inquest, in addition to mileage at 1s. per mile. Besides these, there are thirty-two Coroners, who are paid £1 1s. for each inquest, and mileage.

Bankrupt estates are administered by four Official Assignees, stationed at Auckland, Wellington, Christchurch, and Dunedin, respectively; and by twenty Deputy Assignees, resident at as many other towns. The Supreme and District Courts have jurisdiction in bankruptcy proceedings, and the Governor has power to confer similar jurisdiction in small estates on any of the Magistrates' Courts, but as yet this has not been found necessary.

The Commission of the Peace contains about seventeen hundred names, and additions are frequently made. A rota is kept in every borough and town of Justices residing within three miles of the Courthouse, and the Justices are required either to attend the Court when summoned or to furnish a satisfactory excuse; failing this, they are struck off the Commission. Medical practitioners, Civil servants, and some others, are exempt from such attendance.

Witnesses in Criminal Courts are paid 6s. per diem, and in addition 4s. for every night they are absent from home. Witnesses in civil cases are paid variously from 6s. to £1 1s. a day, according to their condition in life.

Intestate estates in New Zealand are dealt with by the Public Trust Office.

Jury lists are compiled annually by the police, revised by the Bench of Justices, and forwarded to the Sheriffs, who prepare from them special and common jury panels.

DEFENCES, MILITARY AND NAVAL.

THE defence forces consist of the Permanent Militia (Artillery and Submarine Mining Corps), and the auxiliary forces of Volunteers (Cavalry, Mounted Rifles, Naval Artillery, Field Artillery, Engineers, and Rifle companies). There is a Commander of the Forces, who is an Imperial officer, and he has a Staff officer who is also an Imperial officer. To the Under-Secretary for Defence all questions of expenditure are referred; while the Chief Engineer of the Public Works Department has charge of the defence-works.

MILITIA AND VOLUNTEER DISTRICTS.

The two islands (North and Middle) are divided into seven districts, each commanded by a Field Officer of Militia or Volunteers, with a competent staff of drill-sergeants.

PERMANENT MILITIA (ARTILLERY).

This Force is divided into four companies, which are stationed at Auckland, Wellington (head-quarters), Lyttelton, and Dunedin; their principal duties are to look after and take charge of all guns, stores, ammunition, and munitions of war at these four centres.

The Force consists of one major, two captains, one subaltern, with an establishment of 208 of all ranks.

Permanent Militia (Submarine Miners).

This branch, like the Artillery, is divided amongst the four centres for submarine mining and torpedo work, and consists of two captains, with a total establishment of 76 of all ranks. They have charge of four torpedo-boats and four steam-launches, and of all submarine mining and torpedo stores. They are likewise employed in blowing up rocks and wrecks, and generally improving harbours.

Volunteers.—Cavalry.

There are three troops of Cavalry, one in the North Island and two in the Middle Island. These corps are kept in a state of efficiency by going into camp for six days' training annually. The total strength of the three troops is 180 of all ranks.

Volunteers.—Mounted Rifles.

There are eight corps of Mounted Rifles, four in the North Island and four in the Middle Island, with a total strength of 450 of all ranks. These corps go into camp for an annual training of six days.

Volunteers.—Naval Artillery.

There are fifteen batteries of this branch of the service, eight in the North Island and seven in the Middle Island, having a total strength of 1,087 of all ranks. These corps are divided into port and starboard watches at the four centres; some of these corps are trained to assist the Permanent Artillery in working heavy ordnance, whilst others act as auxiliaries to the Submarine Miners in submarine mining and torpedo work. These corps have cutters and other boats provided and kept up for them, and are instructed in rowing, knotting, splicing, signalling, and suchlike duties.

Volunteers.—Garrison Artillery.

There is one corps of Garrison Artillery in the Middle Island with a strength of 50 of all ranks.

Volunteers.—Field Artillery.

There are nine batteries of Field Artillery, three in the North Island and six in the Middle Island, with a total of 514 of all ranks. They are armed with 6-, 9-, and 12-pounder Armstrong breech-loading rifled guns and 6-pounder Nordenfeldts, on field-carriages.

Volunteers.—Engineers.

This branch consists of two corps, with a total of 146 of all ranks, both in the Middle Island. Besides carrying rifles they are provided with entrenching tools and all appliances for blowing up bridges or laying land-mines.

Volunteers.—Rifle Corps.

In this branch of the service there are forty-six corps (besides one honorary reserve), sixteen being in the North Island and thirty in the Middle Island, with a total strength of 2,845 of all ranks including garrison bands.

Volunteers.—Cadet Corps.

There is a force of thirty-eight cadet corps—viz., thirteen in the North Island and twenty-five in the Middle Island, with a total strength of 2,056 of all ranks.

Ordnance, Arms, etc.

The armament at the forts of the four centres consists of 8in. 13-ton breech-loading rifled Elswick Ordnance Company's guns, with 6in. 5-ton, of like pattern, all mounted on hydro-pneumatic disappearing carriages; 7in. 7-ton muzzle-loading rifled guns, on traversing slides; 64-pounder rifled muzzle-loading converted 71cwt. guns, on garrison standing carriages and traversing slides; 64-pounder rifled muzzle-loading 64cwt. guns on traversing slides; 6-pounder quick-firing Nordenfeldts, on garrison pillar-mountings, and field-carriages; Hotchkiss quick-firing guns and Maxim machine guns. The Volunteer Field Artillery are armed with 6-, 9-, and 12-pounder Armstrong breech-loading rifled guns, and 6-pounder Nordenfeldts, and the whole of the adult portion of the Force have carbines or rifles of Martini-Henry pattern; Cadets being armed with Snider carbines.

There is a large stock of Whitehead torpedoes, contact- and ground-mines, in charge of the Submarine Mining Companies, as well as four Thorneycroft torpedo-boats.

Enrolment, etc.

Members of the Permanent Militia are enrolled for three years' service, and Volunteers for one year. The Permanent Militia is principally recruited from men who have one year's efficient service in the Volunteers; and after passing the gunnery and other courses and serving three years in the Permanent Militia the men are eligible for transfer to police and prison service.

Instructors.

The Instructors for Permanent Artillery and Torpedo Corps are obtained from the School of Gunnery at Shoeburyness, and from the Royal Engineers, under a three years' engagement, on completion of which they return to their regiments.

Capitation.

An annual capitation of £2 10s. is granted to each efficient Volunteer, and a sum not exceeding £20 to each efficient cadet corps. One hundred and fifty rounds of Martini-Henry ball-cartridge are issued each year free to every adult Volunteer, and twenty-five rounds of Snider ball to each cadet over thirteen years of age.

ADMINISTRATION.

The defence forces of New Zealand are administered under "The Defence Act, 1886."

EXPENDITURE ON THE ESTABLISHMENT AND MAINTENANCE OF DEFENCES FROM 1884–85 TO 1896–97.

Year.	Military Expenditure.	Harbour Defences.	Total.
	£	£	£
1884–85	90,816	9,601	100,417
1885–86	91,242	127,167	218,409
1886–87	89,927	139,429	229,356
1887–88	122,061	73,458	195,519
1888–89	53,591	50,089	103,680
1889–90	63,614	15,752	79,366
1890–91	80,891	10,798	91,689
1891–92	75,343	7,644	82,987
1892–93	59,808	11,205	71,013
1893–94	56,570	3,976	60,546
1894–95	62,181	2,495	64,676
1895–96	84,981	3,314	88,295
1896–97	82,443	4,690	87,133

LIGHTHOUSES.

THE coasts of New Zealand are, considering their extent, fairly well lighted, but there are many places where lights are still required. Additions to the existing lights are made from time to time as funds are available.

There are twenty-seven coastal lights altogether—eight of the first order, thirteen of the second, three of the third, and three of smaller orders.

There has been no special difficulty in the erection of lighthouses in New Zealand, apart from the trouble caused by indifferent landings. There are no lighthouses built in the sea, such as the well-known Eddystone or Bell Rock. That on The Brothers is the only one which it is considered necessary to keep as a rock-station: that is, the keepers are relieved from time to time, three being always at the station and one on shore.

The cost of the erection of the lighthouses is given by the Marine Department as upwards of £167,651 (the Ponui Passage Lighthouse, having been built by the Provincial Government of Auckland, the cost is not given). The annual consumption of oil is about 19,000 gallons; and the cost of maintenance, irrespective of the cost of maintaining the lighthouse steamer, is about £12,700 a year.

Besides the coastal lighthouses, there are harbour-lights at most of the ports of the colony for the guidance of vessels into and out of the ports.

The following table shows the names of the lighthouses, indicating also their situation, the order of apparatus, description, period (in seconds) and colour of the lights, and of what material the respective towers are built:—

Name of Lighthouse.	Order of Apparatus.	Description.	Period of Revolving Light.	Colour of Light.	Tower built of.
	Dioptric.		Seconds.		
Cape Maria van Diemen	1st order ..	Revolving	60	White	Timber.
	..	Fixed ..	..	Red, to show over Columbia Reef	
Moko Hinou ..	1st " ..	Flashing	10	White	Stone.
Tiri-Tiri (Auckland)	2nd " ..	Fixed ..	..	White, with red arc over Flat Rock	Iron.
Ponui Passage..	5th " ..	" ..	..	White and red ..	Timber.
Cuvier Island ..	1st " ..	Revolving	30	White	Iron.
Portland Island	2nd " ..	"	30	" ..	Timber.
	..	Fixed ..	..	Red, to show over Bull Rock	
Pencarrow Head	2nd " ..	" ..	..	White	Iron.
Cape Egmont ..	2nd " ..	" ..	..	"	"
Manukau Head	3rd " ..	" ..	..	"	Timber.
Kaipara Head ..	2nd " ..	Flashing	10	"	"
Brothers (in Cook Strait)	2nd " ..	"	10	" ..	"
	..	Fixed ..	..	Red, to show over Cook Rock	
Cape Campbell	2nd " ..	Revolving	60	White	"
Godley Head (Lyttelton)	2nd " ..	Fixed ..	..	"	Stone.
Akaroa Head ..	2nd " ..	Flashing	10	"	Timber.
Moeraki ..	3rd " ..	Fixed ..	..	"	"
Taiaroa Head ..	3rd " ..	" ..	..	Red	Stone.
Cape Saunders..	2nd " ..	Revolving	60	White	Timber.
Nugget Point ..	1st " ..	Fixed ..	..	"	Stone.
Waipapapa Point	2nd " ..	Flashing	10	"	Timber.
	Catadioptric.				
Dog Island ..	1st order ..	Revolving	30	"	Stone.
	Dioptric.				
Centre Island ..	1st order ..	Fixed ..	..	White, with red arcs over inshore dangers	Timber.
Puysegur Point	1st " ..	Flashing	10	White	"
Cape Foulwind	2nd " ..	Revolving	30	"	"
Farewell Spit ..	2nd " ..	"	60	White, with red arc over Spit end	"
Nelson ..	4th " ..	Fixed ..	..	White, with red arc to mark limit of anchorage	Iron.
French Pass ..	6th " ..	" ..	..	Red and white, with white light on beacon	"
Stephens Island	1st "	Group flashing	30	White	"
Cape Palliser .. (now building)	2nd " ..	Flashing	Twice every half-minute, with three seconds intervals between flashes	"	"

DÉPÔTS FOR SHIPWRECKED MARINERS.

As eleven of the crew of the barque "Spirit of the Dawn," which was wrecked on Antipodes Island on the 4th September, 1893, remained on the island for eighty-eight days without becoming aware of the existence of the dépôt of provisions and clothing for castaways which is established there, attention may usefully be drawn to the fact that such dépôts are maintained by the New Zealand Government on that island, and on the Auckland, Campbell, Bounty, Kermadec, and Snares Islands.

The following are the positions of the dépôts:—

Auckland Islands.—A dépôt is placed on the south side of Erebus Cove, Port Ross, and another in Camp Cove, Carnley Harbour, and a third at the head of Norman Inlet. One boat is placed on the north-west end of Adams Island, another on Enderby Island, and another on Rose Island.

Campbell Island.—A dépôt is erected in Tucker Cove, Perseverance Harbour, and a boat has been placed at the head of that harbour.

Antipodes Islands.—A dépôt is placed abreast the anchorage on the north-east side of the principal island.

Bounty Islands.—There is a dépôt on the principal island.

Snares Island.—A dépôt has been established on this island in Boat Harbour.

Kermadec Islands.—A dépôt is established on Macaulay Island, near Lava Cascade, on the north-east end of the island, and another on Curtis Island, at the head of Macdonald Cove, on the north-western end of the island.

Finger-posts to indicate the direction of the dépôts have also been put up.

The Government steamer visits the Auckland, Campbell, Antipodes, Bounty, and Snares Islands twice a year, and the Kermadec Islands once a year.

GRAVING DOCKS AND PATENT SLIPS.

VESSELS visiting New Zealand, and requiring docking or repairs, will find ample accommodation at the principal ports of the colony.

There are in New Zealand four graving-docks; two of these are situated in Auckland, one at Lyttelton, and one at Port Chalmers.

AUCKLAND DOCKS.

The Auckland Docks are the property of the Auckland Harbour Board, and cost, with machinery, appliances, &c., £207,000.

The dimensions of the docks at Auckland are as follow:—

	Calliope Dock.	Auckland Dock.
Length over all	525 feet.	312 feet.
Length on floor	500 "	300 "
Breadth over all	110 "	65 "
Breadth on floor	40 "	42 "
Breadth at entrance	80 "	43 "
Depth of water on sill at high water (ordinary spring tides)	33 "	13½ "

The following is the scale of charges for the use of the Auckland and Calliope Graving Docks and appliances:—

Auckland Graving Dock.	£	s.	d.
Entrance fee	1	1	0
For every vessel of 100 tons (gross register), or under, per day	4	0	0
For every vessel over 100 tons (gross register), for first 100 tons, per day	4	0	0
For every additional ton (gross register), per day ..	0	0	2
For two or more vessels docking at the same time, the tonnage of which together does not exceed 100 tons (gross register), per day each	2	10	0

For shores cut in docking or hanging the vessel, there must be paid, according to injury done, such amount as may be fixed by the Dock-master.

For use of steam-kiln, 10s. per day.

For use of pitch furnace, 10s. per day.

Calliope Graving Dock.	£	s.	d.
Entrance fee	5	5	0
For all vessels up to 300 tons (gross register)	20	0	0
For all vessels 301 to 400 tons "	22	10	0
" 401 to 500 tons "	25	0	0
" 501 to 600 tons "	27	10	0
" 601 to 700 tons "	30	0	0
" 701 to 800 tons "	32	10	0
" 801 to 900 tons "	35	0	0
" 901 to 1,000 tons "	37	10	0
" 1,001 to 1,100 tons "	40	0	0
" 1,101 to 1,200 tons "	45	0	0
" 1,201 to 1,300 tons "	50	0	0
" 1,301 to 1,500 tons "	55	0	0
" 1,501 to 2,000 tons "	60	0	0
" 2,001 to 3,000 tons "	65	0	0
" 3,001 to 4,000 tons "	70	0	0
" 4,001 to 5,000 tons "	75	0	0

The foregoing charges are for three days or less. After the third day in dock the following rates are charged:—

For all vessels up to 500 tons (gross register), 4d. per ton a day.

For all vessels of 501 tons to 1,000 tons (gross register), 3d. per ton a day.

For all vessels over 1,001 tons up to 2,000 tons (gross register), 2½d. per ton a day.

For all vessels over 2,001 tons (gross register) and upwards, 2d. per ton a day.

Twenty per cent. reduction on Calliope Dock rates is allowed when two or three vessels can arrange to dock on the same tide, and remain in dock the same number of hours; but such reduction is not allowed if any of the Auckland Harbour Board's vessels are docked at the same time as another vessel.

For shores cut in docking or hanging the vessel, there is to be paid, according to injury done, such amount as may be fixed by the Dock-master.

During the year 1896, 112 vessels of various descriptions, with a total of 33,712 tons, made use of the Auckland Graving Dock for repairs or painting.

The Calliope Dock was used by the war steamers "Katoomba," 2,500 tons; "Goldfinch," 700; "Orlando," 5,000; "Wallaroo," 2,500; the merchant steamers "Rakaia," 5,628; "Buteshire," 5,574; "Rangatira," 4,025 (twice); "Wakatere," 441; "Waiotaki," 278; dredges, 657 (three times); punts, 245 tons. Seventy-one vessels with an aggregate tonnage of 34,147 tons, were docked during 1896.

Dock dues for the year amounted to £2,037 2s. 7d.

Lyttelton Dock and Patent Slip.

The graving-dock at Lyttelton, which is the property of the Harbour Board, is capable of docking a first-class ironclad, or any of the large ocean steamers except the "Gothic" now running to the colony. Its general dimensions are: Length over all, 503ft.; length on floor, 450ft.; breadth over all, 82ft.; breadth on floor, 46ft.; breadth at entrance, 62ft.; breadth where ship's bilge would be, 54ft.; depth of water on sill at high-water springs, 23ft.

The scale of charges for the use of the dock and pumping machinery are as follow:—

	£	s.	d.
For all vessels up to 300 tons, for four days or less ..	20	0	0
" 301 to 400 tons, " ..	22	10	0
" 401 to 500 tons, " ..	25	0	0
" 501 to 600 tons, " ..	27	10	0
" 601 to 700 tons, " ..	30	0	0
" 701 to 800 tons, " ..	32	10	0
" 801 to 900 tons, " ..	35	0	0
" 901 to 1,000 tons, " ..	37	10	0
" 1,001 to 1,100 tons, " ..	40	0	0
" 1,101 to 1,200 tons, " ..	45	0	0
" 1,201 tons and upwards, " ..	50	0	0

After the fourth day in dock, the following rates are charged:—

For all vessels up to 500 tons	4d. per ton per day.
For all vessels of 501 tons to 1,000 tons ..	3d. "
For all vessels over 1,001 tons up to 2,000 tons ..	2¾d. "
2,001 tons up to 3,000 tons ..	2½d. "
3,001 tons up to 4,000 tons ..	2¼ "
" 4,001 tons up to 5,000 tons ..	2d. "

Twenty per cent. reduction on the above rates is allowed when two or three vessels can arrange to dock on the same tide and remain in dock the same number of hours. Two vessels of 1,000 tons each can be docked at the same

time. The 20-per-cent. rebate is not allowed if any of the Lyttleton Harbour Board's vessels are docked at the same time as another vessel. The twenty-four hours constituting the first day of docking commences from the time of the dock being pumped out.

Any vessel belonging to H.M. Navy or any colonial Government, or any commissioned ship belonging to any foreign nation, is admitted into the graving dock without payment of the usual dock dues, but is charged only such sum as is necessary for the reimbursement of actual expenditure of stores, wages, and materials.

There are electric lights, one on each side of the graving-dock; and there is a workshop alongside the dock, and several other engineering works within a short distance of it, where repairs and heavy foundry-work can be done.

The graving dock and machinery cost £105,000. The interest and sinking fund on that sum, at 6½ per cent., amounts to £6,825 per annum. Since its construction, the dock dues for the fourteen years, ended 31st December, 1896, amounted to £12,057 9s. 6d., and the working expenses to £8,166 15s. 6d., leaving a credit balance for fourteen years, ended 31st December, 1896, of £3,890 14s.

During the year 1896 fifteen vessels were docked, the aggregate tonnage being 34,590, and the dock dues amounted to £1,688 10s. 4d. For the fourteen years ending 1896 259 vessels were docked.

Alongside the graving dock is a patent slip, with a cradle 150ft. in length, suitable for vessels of 300 tons. It belongs to the Harbour Board.

Otago Graving Dock.

The dock at Port Chalmers is vested in the Otago Dock Trust, a body entirely distinct from the Otago Harbour Board. Vessels of large size can be taken in the Otago Dock, as the following measurements will show:—

Length over all	335 feet.
Length on the floor	328 "
Breadth over all	68 "
Breadth on floor	41 "
Breadth where ship's bilge would be	43 "
Breadth at dock gates	50 "
Depth of water on sill at high-water (ordinary spring tides)	17½ "

Connected with the Otago Dock are a large machine-shop, steam-hammer, and forge, with all the appliances necessary for performing any work that may be required by vessels visiting the port. An 80-ton sheer-legs has also been erected for heavy lifts.

There is also a patent slip, used for taking up small vessels.

All vessels using the Otago Graving Dock are liable to dock dues according to the following scale (unless under special contract), revised since the beginning of 1896:—

	£	s.	d.
Vessels under 200 tons, for the first four days, or part of four days	25	0	0
Vessels of 200 tons, and under 800 tons	30	0	0
" 800 tons and upwards	42	10	0

And for every day, or part of a day, after the first four days :—

Vessels under 300 tons ..	8d.	per register ton per day.	
" 300 " and under 400 tons	7¾d.	"	
" 400 " " 500 "	7½d.	"	
" 500 " " 600 "	7¼d.	"	
" 600 " " 700 "	7d.	"	
" 700 " " 800 "	6¾d.	"	
" 800 " " 900 "	6½d.	"	
" 900 " " 1,000 "	6¼d.	"	
" 1,000 tons and upwards	6d.	"	

During the last twelve months, ending 31st December, 1896, the dock was in use 230 working days. The number of vessels docked was fifty-nine, having a total registered tonnage of 43,451.

Wellington Patent Slip.

The Port of Wellington has no dock; but there is a well-equipped patent slip at Evans Bay, on which vessels of 2,000 tons can be safely hauled up. This slip is the property of a private company, and is in no way connected with the Harbour Board. It is 1,070ft. long, with a cradle 260ft. in length. There is a depth of 32ft. at high water at the outer end of the slip. A dolphin and buoys are laid down for swinging ships in Evans Bay.

The company has convenient workshops, which contain machinery necessary for effecting all ordinary repairs to vessels using the slip.

During the year ending 31st March, 1897, there were 107 vessels of various sizes taken up on the slip for repairs, cleaning, painting, &c., of an aggregate tonnage of 42,098 tons. The charges for taking vessels on the slip and launching them are 1s. per ton on the gross tonnage for the first full twenty-four hours, and 6d. per ton per day afterwards, unless by special agreement.

Timaru Slip.

The Timaru slip is capable of taking up a vessel of 200 tons.

Nelson Cradle.

The Anchor Steamship Company's cradle can take up a vessel of 150 tons.

ANNUAL PENSIONS

PAID BY THE GOVERNMENT OF NEW ZEALAND, AS ON 31ST MARCH, 1897.

[By an Act passed in 1871 the pension system was abolished in New Zealand. In 1893 the Civil Service Insurance Act was passed, the main provisions of which are described at the end of this table.]

Name.	Date from which Pension commenced.	Amount.			Name.	Date from which Pension commenced.	Amount.		
Under "The Civil Service Act, 1866."		£	s.	d.	*Under "The Civil Service Act, 1866"—ctd.*		£	s.	d.
Allan, A. S. ..	1 Sept.,1888	195	5	0	Freeth, J. J. ..	1 Mar.,1894	116	13	4
Andrews, A. ..	1 May, 1896	141	12	0	Gill, R. J. ..	1 Sep., 1886	228	11	5
Arrow, H. ..	1 Aug., 1881	26	0	0	Gisborne, W. ..	1 Oct., 1876	466	13	4
Austin, A. D. ..	1 Oct., 1887	247	10	0	Graham, G. H. ..	8 Sep., 1891	52	10	0
Anderson, J. G. ..	6 Jan., 1896	261	18	1	Gregory, J. ..	16 Feb., 1881	53	6	8
Baddeley, H. C. ..	12 Jan., 1888	225	0	0	Greenway, J. H. ..	1 Nov., 1891	116	16	0
Bailie, F. ..	1 Feb., 1893	77	8	8	Giles, J. ..	1 Feb., 1894	238	6	8
Baker, E. ..	1 Nov., 1880	214	17	1	Halliday, C. ..	31 Aug., 1886	96	13	4
Barnard, W. H. ..	1 June,1880	101	18	1	Hamilton, M. ..	11 July, 1880	200	0	0
Barnes, G. H. ..	16 Feb., 1896	100	0	0	Harsant, W. ..	11 June, 1878	151	13	4
Barr, A. ..	1 Oct., 1888	366	13	4	Hart, J. T. ..	12 Nov., 1890	193	7	0
Batkin, C. T. ..	1 April,1890	533	6	0	Hartwright, H. ..	1 Jan., 1886	152	7	8
Bertrand, J. R. ..	17 Feb., 1895	135	0	0	Haselden, C. J. A.	1 July, 1896	255	19	1
Bicknell, F. ..	1 Feb., 1882	96	13	4	Heddell, P. ..	17 Oct., 1894	90	0	0
Blomfield, J. ..	21 Mar., 1889	101	15	0	Henn, J. ..	1 April,1893	88	3	4
Bridson, W. ..	1 Aug., 1893	146	8	7	Hill, C. J. ..	9 Feb., 1895	72	0	0
Brown, W. R. E.	1 Aug., 1892	265	16	8	Holden, T. ..	13 Oct., 1878	31	5	0
Buchanan, J. ..	1 July, 1886	127	13	6	Jackman, S. J. ..	1 May, 1892	149	6	8
Bull, E. ..	1 July, 1887	105	14	3	Johnston, D. ..	15 Dec., 1880	366	13	4
Burgess, A. ..	1 June,1886	116	13	4	Judd, A. ..	1 April, 1887	173	6	8
Burn, J. F. ..	1 July, 1887	51	0	0	Keetley, E. ..	1 July, 1884	18	12	10
Butts, E. D. ..	1 April,1893	258	6	8	Kelly, J. D. ..	1 July, 1891	130	19	0
Campbell, F. E. ..	1 Mar., 1890	466	13	0	Kissling, T. ..	1 Jan., 1894	317	5	2
Carrington, O. ..	1 Feb., 1878	300	0	0	Laing, E. B. ..	1 April, 1887	112	10	0
Chapman, R. ..	1 Jan., 1868	255	19	0	Laing, W. ..	1 Feb., 1896	212	10	0
Cheeseman, G. H.	1 Mar., 1893	82	10	0	Lang, A. ..	1 Feb., 1893	75	15	3
Cheesman, W. F.	1 April,1890	154	15	1	Lemon, C. ..	1 Mar., 1895	350	0	0
Clarke, H. T. ..	1 Jan., 1879	400	0	0	Lincoln, R. S. ..	1 Mar., 1889	68	17	0
Clarke, H. ..	1 Oct., 1879	98	13	0	Lodge, W. F. ..	1 Oct., 1881	185	0	0
Cook, R. C. ..	1 Sept.,1895	160	14	3	Lubecki, A. D. ..	1 April,1896	200	0	0
Cooper, G. S. ..	1 Aug., 1892	533	6	8	Lundon, D. ..	1 May, 1892	210	0	0
Costall, J. ..	10 July, 1892	131	3	10	Lusher, R. A. ..	31 Aug., 1880	76	16	8
Creeke, W. ..	1 April,1891	52	15	8	Meikle, A. M. ..	1 May, 1887	145	14	3
Crowe, A. ..	31 Dec., 1885	68	12	3	Millar, G. ..	1 Feb., 1896	80	7	0
Culpan, W. ..	1 Dec., 1868	62	10	0	Mills, W. ..	23 Sept.,1875	385	14	4
Cunningham, J. ..	1 Feb., 1888	175	0	0	Mitford, G. M. ..	1 Feb., 1869	196	15	0
DeCastro, C. D.	1 Mar., 1892	172	10	0	Monson, J. R. ..	1 Oct., 1882	271	16	0
Dick, S. J. ..	1 Feb., 1893	250	0	0	Monro, H. A. H. ..	1 Nov.,1880	342	17	2
Dickey, A. J. ..	1 Nov., 1875	122	0	5	Morpeth, W. J. ..	4 Aug., 1894	195	4	9
Earle, J. ..	13 Nov. 1888	104	10	0	Morrow, H. ..	1 June,1890	120	16	8
Eliott, G. E. ..	30 Nov., 1872	400	0	0	Macarthur, J. ..	1 Jan., 1876	65	0	0
Falck, F. ..	1 Mar., 1893	125	13	4	McCulloch, H. ..	1 Aug., 1890	233	0	0
Fenton, F. D. ..	3 Nov., 1881	630	19	0	MacDonnell, R. T.	23 July, 1890	150	0	0
Filleul, W. G. ..	16 April,1896	140	16	8	McKellar, H. S. ..	1 Aug., 1892	433	6	8

ANNUAL PENSIONS—*continued.*

Name.	Date from which Pension commenced.	Amount.			Name.	Date from which Pension commenced.	Amount.		
Under "The Civil Service Act, 1866"—continued.					*Under "The Civil Service Act, 1866"*—continued.				
		£	s.	d.			£	s.	d.
Norris, E. F. ..	1 Oct., 1895	88	17	9	Veale, J. S. ..	1 Sept.,1887	56	2	10
O'Brien, L. ..	1 April,1896	273	5	0	Von Sturmer, S...	1 July, 1895	288	1	11
O'Connor, R. ..	1 Sept.,1892	147	0	6	Wardell, H. S. ..	1 July, 1888	366	13	0
Parker, T. W. ..	1 June, 1881	242	3	9	Watson, R. ..	1 Oct., 1892	145	0	0
Parris, R. ..	1 Jan., 1877	314	5	8	White, W. ..	1 July, 1881	36	5	0
Pauling, G. W. ..	1 Feb., 1887	91	1	5	White, W. B. ..	1 July, 1873	375	4	9
Pearson, W. H. ..	30 Sept., 1884	340	9	6	Wilkin, J. T. W...	1 Feb., 1874	127	19	4
Phillips, W. M. ..	1 Dec., 1894	69	4	5	Williams, E. M. ..	1 April, 1880	135	0	0
Pickett, R. ..	1 Aug., 1866	209	10	6	Wilson, W. W. ..	1 Feb., 1881	100	14	3
Pinwill, A. ..	1 July, 1891	120	17	0	Woon, J. G. ..	1 July, 1892	209	10	6
Pitt, H. ..	1 May, 1881	100	0	0	Wrigg, H. C. W...	1 Aug., 1889	157	2	10
Plimpton, R. E. E.	4 Dec., 1883	110	14	3					
Powell, D. ..	1 July, 1893	44	1	8	*Under "The Hamerton Pension Act, 1891."*				
Rawson, C. E. ..	1 Dec., 1895	244	0	11	Hamerton, R. C.	11 Sept., 1891	250	0	0
Rennell, W ..	1 Dec., 1895	167	18	4					
Rich, E. F. ..	1 June, 1892	217	0	0					
Robertson, J. ..	6 Oct., 1892	155	0	0	*Under "The Meredith and Others Pensions Act, 1870."*				
Rodgerson, W. J.	1 July, 1892	248	6	8					
Rogan, J. ..	1 Jan., 1878	466	13	4	Collins, Mary ..	13 Nov., 1869	65	0	0
Rough, D. ..	1 May, 1868	277	1	8	Hamlin, Rhoda B.	1865	50	0	0
Rowe, C. ..	1 Oct., 1894	109	16	0					
Searancke, W. N.	1 Feb., 1879	240	0	0					
Sheath, A. B. ..	31 Mar., 1880	129	9	0	*Under "The Military Pensions Act, 1866."*				
Shrimpton, J. ..	16 July, 1889	146	14	0					
Sinclair, A. ..	1 June, 1878	195	0	0	Arapera te Reo..	1 July, 1870	20	0	0
Smith, F. M. ..	1 Jan., 1897	66	13	0	Brown, M. R. ..	..	75	0	0
Smith, J. ..	1 June, 1894	49	5	6	Hastings, L. ..	..	55	0	0
Smith, J. E. ..	1 July, 1877	484	11	6	Iritona, Hanita..	8 Nov., 1868	12	0	0
Smith, T. H. ..	1 July, 1876	371	8	7	Marara, Ngakoa	3 Dec., 1860	36	0	0
Snoswell, T. ..	5 Dec., 1891	83	14	0	McDonald, E. ..	..	36	0	0
Snow, C. H. ..	1 Dec., 1887	157	10	0	Morrison, Ann ..	26 Oct., 1865	36	0	0
Somerville, W. ..	1 July, 1896	195	0	0	Russell, C. ..	..	36	0	0
Stevens, F. ..	1 Dec., 1892	183	0	0	Von Tempsky, A.	3 Oct., 1868	120	0	0
Stewart, J. T. ..	1 May, 1889	300	0	0	Adamson, T. ..	(a)	0	2	2*
Taylor, G. ..	1 Mar., 1893	121	0	0	Beamish, J. G...	(b)	0	1	6*
Thomas, G. W. ..	1 Nov., 1875	38	15	0	Corbett, George	(c)	0	2	0*
Thompson, R. ..	1 Mar., 1896	220	0	0	Crawford, C. F.	..	0	2	0*
Tizard, E. F. ..	1 July, 1888	180	19	0	Dore, G. H. ..	(d)	0	2	0*
Tovey, J. H. ..	1 April, 1895	77	0	10	Gibbons, M. C...	12 Oct., 1869	0	2	2*
Tucker, W. ..	31 Dec., 1880	104	13	4	Hamblyn, J. ..	1 Oct., 1872	0	2	2*
Veal, J. ..	1 Sept.,1885	49	15	3	Hope, E. L. ..	(e)	0	1	6*

* Per diem.

(a) 1s. 6d. from 25th October, 1869; increased to 2s. 2d., 7th December, 1870.

(b) 1s. from 17th December, 1868, to 17th December, 1869; 1s. 6d. from 17th December, 1869, to 17th December, 1870; 8d. from 17th December, 1870, to 30th September, 1874; increased to 1s. 6d., 1st October, 1874.

(c) 2s. from 5th June, 1867, to 5th June, 1868; 2s. from 5th June, 1868, to 5th June, 1869; permanent from 9th November, 1869.

(d) 2s. from 1st January, 1869, for eighteen months; permanent from 18th May, 1872.

(e) 1s. 6d. for twelve months, from 26th April, 1869; renewed for twelve months, 1870 renewed for twelve months, 1871; permanent from 12th May, 1872.

ANNUAL PENSIONS—*continued.*

Name.	Date from which Pension commenced.	Amount.		
Under "The Military Pensions Act, 1866"—continued.		£	s.	d.
Kelly, T. ..	9 April, 1870	0	2	2*
Kershaw, P. ..	9 Aug., 1869	0	1	6*
Lacey, Garrett ..	..	0	2	2*
Lake, T. ..	..	0	2	6*
Lloyd, T. ..	(f)	0	2	0*
McDonnell, W...	..	150	0	0
McKay, G. ..	..	0	1	0*
McMahon, T. ..	(g)	0	2	0*
Monck, J. B. ..	1 April, '72 (h)	0	1	0*
Ross, Edward O.	17 Nov., 1866	75	0	0
Shanaghan, J. ..	..	0	1	6*
Shepherd, R. ..	(i)	0	2	8*
Timms, W. ..	(k)	0	1	6*
Tuffin, G. ..	..	0	2	2*
Vance, R. ..	8 April, 1870	0	2	2*
Walsh, W. ..	15 Nov., 1866	0	1	6*
Wasley, Edw. O.	(l)	0	2	2*
Williamson, F. ..	1 June, 1869	0	2	0*
Anaru Patapu ..	14 May, 1865	0	0	9*
Apera te Keunga	14 May, 1864	0	2	6*
Karena Ruatani-wha	1 July, 1870	0	1	0*
Matiu Whitiki ..	1 April, 1885	0	0	6*
Mauparoa ..	1 July, 1867	0	1	0*
Mehaka Kepa ..	2 Aug., 1865	0	0	9*
Pera Taitimu ..	12 Oct., 1869	0	1	0*

Name.	Date from which Pension commenced.	Amount.		
Under "The Walsh and Other Pensions Act, 1869."		£	s.	d.
Hewett, Ellen A.	10 Feb., 1865	50	0	0
Under "The Militia Act Amendment Act, 1862."				
Bending, W. ..	..	0	2	0*
Bilton, F. ..	..	0	2	0*
Cody, W. ..	..	0	1	0*
Dunn, A. J. N. ..	..	0	2	0*
King, E. M. ..	..	80	0	0
Leaf, R. ..	(m)	0	0	6*
Sarten, Lucy ..	1864	0	2	0*
Skinner, W. H...	..	0	2	6*
Vickery, W. ..	..	0	2	0*
Woolfe, T. ..	..	0	2	0*
Under "The Schafer, McGuire, and Others Pensions Act, 1872."				
McGuire, E. ..	29 Sept., 1871	0	1	0*
Russell, W. ..	1 July, 1871	0	1	0*
Schafer, C. ..	1 July, 1871	30	0	0
Under "The Supreme Court Judges Act, 1874."				
Gresson, H. B. ..	1 April, 1875	750	0	0

* Per diem.

(f) 2nd October, 1869; ceased on 9th April, 1870; renewed, 22nd April, 1874.

(g) 1s. 6d. from —, 1867; increased to 2s. from 14th February, 1868.

(h) 1s. 6d. for twelve months, from 15th March, 1869; 1s. for twelve months, from March, 1870; 1s. for twelve months, from March, 1871; permanent from 1st April, 1872.

(i) 3s. for twelve months, from 9th April, 1870; 2s. 8d., permanent, from 1st May, 1871.

(k) 1s. 6d. for twelve months, from 18th October, 1869; 1s. 6d. for twelve months, from October 1870; permanent from 5th November, 1871.

(l) 1s. 6d. for eight months, from 20th September, 1869; 2s. 2d. for twelve months, from 11th June, 1870; 2s. 2d. for twelve months, from 11th June, 1871; 2s. 2d. from 11th June, 1872; permanent from 12th June, 1873.

(m) 1s. from 10th May, 1865; renewed for twelve months, April, 1866; again renewed for twelve months; 8d. for twelve months, from 1868, to 10th May, 1869; 6d. for twelve months, from May, 1869; permanent from 11th May, 1870.

"THE CIVIL SERVICE INSURANCE ACT, 1893."

It is provided by the above-named Act that every person appointed to the Civil Service under "The Civil Service Reform Act, 1886," or afterwards, shall retire at the age of sixty years; but the Governor in Council may, nevertheless, require any officer who has attained such age to continue to perform his duties, unless unfitted by reason of ill-health or other cause.

Every officer appointed after the passing of this Act is required to effect a policy with the Government Life Insurance Commissioner (on his life), providing for the following combined benefits:—

(1.) The payment of a sum of money on the death of such officer, should it occur before he attains the age of sixty years; and

(2.) The payment to such officer of an annuity until death should he survive the age of sixty years.

The premiums are paid in the form of deductions from the salaries of officers effecting policies according to the following schedule. The policies and moneys secured thereby are not assignable, and cannot be charged or attached.

There are provisions for payment of surrender value of policies to officers whose services are dispensed with, or who voluntarily leave the Service.

ANNUAL DEDUCTIONS FOR POLICIES.

	£ s. d.		£ s. d.
Under £150	.. 5 0 0	£500 and under £550	.. 25 0 0
£150 and under £200	.. 7 10 0	£550 „ £600	.. 27 10 0
£200 „ £250	.. 10 0 0	£600 „ £650	.. 30 0 0
£250 „ £300	.. 12 10 0	£650 „ £700	.. 32 10 0
£300 „ £350	.. 15 0 0	£700 „ £750	.. 35 0 0
£350 „ £400	.. 17 10 0	£750 „ £800	.. 37 10 0
£400 „ £450	.. 20 0 0	£800	.. 40 0 0
£450 „ £500	.. 22 10 0		

THE CUSTOMS TARIFF OF NEW ZEALAND.

Under the Customs and Excise Duties Acts, 1888 and 1895, and "The Tobacco Excise Duties Act, 1896."

TABLE OF DUTIES.

THE headings of the respective classes in this Table and in the Table of Exemptions are used solely for convenience of classification, and shall not in any way affect the articles specified therein, or be construed to indicate the material of which any such article is made.

The word "iron" includes steel, or steel and iron combined.

Neither steam-engines, nor parts of steam-engines, nor steam-boilers (land or marine) are included in the expression "machines" or "machinery" in either this Table or the Table of Exemptions.

The abbreviaton "n.o.e." means not otherwise enumerated.

CLASS I.—FOODS AND ARTICLES FOR HUMAN CONSUMPTION.

Names of Articles and Rates of Duty.

1. Almonds, in the shell, 2d. the lb.
2. Almonds, shelled, n.o.e, 3d. the lb.
3. Bacon and hams, 2d. the lb.
4. Biscuits, ships', plain and unsweetened, 3s. the cwt.
5. Biscuits, other kinds, 2d. the lb.
6. Boiled sugars, comfits, lozenges, Scotch mixtures, and sugar-candy, 2d. the lb., including internal packages.
7. Candied peel and drained peel, 3d. the lb.
8. Capers, caraway seeds, catsup, cayenne pepper, chillies, chutney, curry-powder and -paste, fish-paste, gelatine, isinglass, liquorice, olives, 20 per cent. *ad valorem.*
9. Chocolate confectionery, and all preparations of chocolate or cocoa—
   In plain trade packages, 3d. the lb.
   In fancy packages, or in small packages for retail sale, 20 per cent. *ad valorem.*
10. Confectionery, n.o.e., 2d. the lb., including internal packages.
11. Fish, dried, pickled, or salted, n.o.e., 10s. the cwt.
12. Fish, potted and preserved, 2d. the lb., or packages of that reputed weight, and so in proportion for packages of greater or less reputed weight.
13. Fruit, fresh, viz.:—
    Apples, pears, plums, cherries, peaches, nectarines, medlars, apricots, quinces, tomatoes, 1d. the lb.
    (No duty exceeding ½d. the lb. to be levied on apples and pears from 14th July to 31st December.)
    Currants, raspberries, gooseberries, blackberries, and strawberries, ½d. the lb.
    Lemons, ½d. the lb.
14. Fruits, dried, 2d. the lb.
15. Fruits, preserved in juice or syrup, 25 per cent. *ad valorem.*
16. Fruit-pulp, and partially preserved fruit, n.o.e., 1½d. the lb.
17. Fruits preserved by sulphurous acid, 1d. the lb.
18. Glucose, 1d. the lb.
19. Honey, 2d. the lb.
20. Jams, jellies, marmalade, and preserves, 2d. the lb. or packages of that reputed weight, and so in proportion for packages of greater or less reputed weight.
21. Jellies concentrated in tablets or powder, 4d. the lb.
22. Maizena and cornflour, ½d. the lb.
23. Meats, potted or preserved, 20 per cent. *ad valorem.*
24. Milk, preserved, 25 per cent. *ad valorem.*
25. Mustard, 2d. the lb.
26. Nuts of all kinds, except cocoanuts, 2d. the lb.
27. Oysters, preserved, 2d. the lb. or packages of that reputed weight, and so in proportion for packages of greater or less reputed weight.
28. Pearl barley, 1s. the cwt.
29. Peas, split, 2s. the cwt.
30. Pickles, 3s. the imperial gallon.
31. Provisions, n.o.e., 20 per cent., *ad valorem.*
32. Rice and rice-flour, 6s. the cwt.
33. Rice, undressed, and dressed in bond, 4s. the cwt.
34. Salt, except rock-salt, 10s. the ton.
35. Sardines, including the oil, 2d. the lb.
36. Sauces, 4s. the imperial gallon.
37. Spices, including pepper and pimento, unground, 2d. the lb.
38. Spices, including pepper and pimento, ground, 4d. the lb.
39. Sugar, ½d. the lb.
40. Treacle and molasses, ½d. the lb.

41. Vegetables, fresh, dried, or preserved, 20 per cent., *ad valorem*.
42. Vinegar, table, not exceeding 6·5 per cent. of acidity,* 6d. the gallon.

CLASS II.—TOBACCO.

43. Cigarettes, not exceeding in weight 2½lb. per 1,000, 17s. 6d. the 1,000. And for all weight in excess of 2½lb. per 1,000, 6d. the oz.
44. Cigars, 7s. the lb.
45. Snuff, 7s. the lb.
46. Tobacco, 3s. 6d. the lb.
47. Tobacco unmanufactured, entered to be manufactured in the colony in any licensed tobacco manufactory, for manufacturing purposes only, into tobacco, cigars, cigarettes, or snuff, 2s. the lb.

CLASS III.—ALCOHOLIC BEVERAGES, AND MATERIALS FOR MAKING SAME.

48. Ale, beer of all sorts, porter, cider, and perry, the gallon, or for six reputed quart bottles, or 12 reputed pint bottles, 2s. the gallon.
49. Cordials, bitters, and liqueurs, 16s. the liquid gallon.
50. Hops, 6d. the lb.
51. Malt, 2s. the bushel.
52. Rice malt, 1d. the lb.
53. Solid wort, 6d. the lb.
54. Spirits and strong waters, the strength of which can be ascertained by Sykes's hydrometer, 16s. the proof gallon.
    (No allowance beyond 16·5 under proof shall be made for spirits or strong waters of a less hydrometer strength than 16·5 under proof.)
55. Spirits and strong waters, sweetened or mixed, when not exceeding the strength of proof, 16s. the liquid gallon.
56. Spirits and strong waters in cases shall be charged as follows, namely:—
    Two gallons and under, as two gallons; over two gallons and not exceeding three, as three gallons; over three gallons and not exceeding four, as four gallons; and so on for any greater quantity contained in any case.
57. Spirits or strong waters, mixed with ingredients in any proportion exceeding 33 per cent. of proof spirit, and although thereby coming under any other designation, excepting patent or proprietary medicines, or tinctures and medicinal spirits otherwise enumerated, 16s. the liquid gallon.
58. Wine, Australian, containing not more than 35 per cent. of proof spirit verified by Sykes's hydrometer, the gallon, or for six reputed quart bottles, or twelve reputed pint bottles, 5s. the gallon.
59. Wine, other than sparkling and Australian, containing less than 40 per cent. of proof spirit verified by Sykes's hydrometer, the gallon, or for six reputed quart bottles, or twelve reputed pint bottles, 6s. the gallon.
60. Wine, sparkling, 9s. the gallon.

CLASS IV.—NON-ALCOHOLIC BEVERAGES, AND MATERIALS FOR MAKING SAME.

61. Aërated and mineral waters and effervescing beverages, 20 per cent. *ad valorem*.
62. Chicory, 3d. the lb.
63. Chocolate, 3d. the lb.
64. Cocoa, 3d. the lb.
65. Coffee, essence of, 20 per cent. *ad valorem*.
66. Coffee, raw, 2d. the lb.
67. Coffee roasted, 5d. the lb.
68. Syrups; lime- or lemon-juice sweetened; raspberry vinegar, 25 per cent. *ad valorem*.
69. Tea, 4d. the lb.

* Vinegar exceeding 6·5 per cent. of acidity to be treated as acetic acid.

Class V.—Drugs, Medicines, Chemicals, and Druggists' Sundries.

70. Acid, acetic, n.o.e., containing not more than 30 per cent. of acidity, 1½d. the lb.
    For every 10 per cent. of acidity or fraction thereof additional, ½d. the lb.
71. Acid, tartaric, 1d. the lb.
72. Baking-powder, yeast preparations, and other ferments, 20 per cent. *ad valorem.*
73. Chemicals n.o.e., including photographic chemicals and glacial acetic acid, 20 per cent. *ad valorem.*
74. Cream of tartar, 1d. the lb.
75. Drugs and druggists' sundries and apothecaries' wares, n.o.e., 20 per cent. *ad valorem.*
76. Essences, flavouring, spirituous, 15 per cent. *ad valorem* until 1st February, 1896, and thereafter 16s. the liquid gallon.
77. Essences, flavouring, n.o.e., 15 per cent. *ad valorem.*
78. Eucalyptus oil, in bulk or bottle, 20 per. cent. *ad valorem.*
79. Glycerine, refined, 20 per cent. *ad valorem.*
80. Opium, 40s. the lb.
81. Patent medicines, 40 per cent. *ad valorem.*
82. Proprietary medicines, or medicaments, (1) bearing the name of the proprietor on label or package; (2) bearing a prefixed name in the possessive case; (3) n.o.e., prepared by any occult secret or art, 40 per cent. *ad valorem.*
83. Saccharine, except in the form of tabloids or tablets, 1s. 6d. the ounce.
84. Sarsaparilla, 25 per cent. *ad valorem.*
85. Soda, carbonate and bicarbonate, 1s. the cwt.
86. Soda, crystals, 2s. the cwt.
87. Tinctures and medicinal spirits of any recognised pharmacopœia, containing more than 50 per cent. of proof spirit, 1s. the lb.
88. Tinctures and medicinal spirits of any recognised pharmacopœia, containing less than 50 per cent. of proof spirit, 6d. the lb.

Class VI.—Clothing and Textile Goods.

89. Apparel and ready-made clothing, and all articles n.o.e. made up wholly or in part from textile or other piece-goods, 25 per cent. *ad valorem.*
90. Apparel made by British or foreign tailors, dress-, mantle-, or jacket-makers, to the order of residents in the colony, and intended for the individual use of such residents, whether imported by the residents themselves or through an importing firm, 40 per cent. *ad valorem.*
91. Blankets, 20 per cent. *ad valorem.*
92. Collars and cuffs, of paper or other material, 25 per cent. *ad valorem.*
93. Cotton counterpanes, 20 per cent. *ad valorem.*
94. Cotton piece-goods, to include turkey twills, dress prints (hard-spun and plain-woven), where the invoice value does not exceed 4d. the yard; and cotton piece-goods n.o.e., 10 per cent. *ad valorem.*
95. Cotton piece goods—namely, tapestry; cretonnes; chintz art crêpe, and serges; velveteens, velvets, and plushes, all kinds; damasks, moquette; sateens, linenettes; crepons; crimps; zephyrs; ginghams; turkey twills; prints; printed cottons; piqués; vestings; quiltings and marcellas; muslins of all kinds; nets; window-nets; hollands, curtains, and blinds; diapers; ticks, including coloured Belgian; towellings; laces: 20 per cent. *ad valorem.*
96. Drapery n.o.e., 20 per cent. *ad valorem.*
97. Feathers, ornamental (including ostrich), and artificial flowers, 25 per cent. *ad valorem.*
98. Forfar, dowlas, and flax sheeting, n.o.e., 20 per cent. *ad valorem.*
99. Furs, 25 per cent. *ad valorem.*

100. Haberdashery n.o.e., 20 per cent. *ad valorem.*
101. Hats of all kinds, including straw hats, also caps, 25 per cent *ad valorem.*
102. Hosiery n.o.e., 20 per cent. *ad valorem.*
103. Lace, and laces, n.o.e., 25 per cent. *ad valorem.*
104. Millinery of all kinds, including trimmed hats, caps, and bonnets, 25 per cent. *ad valorem.*
105. Ribbons and crape, all kinds, 25 per cent. *ad valorem.*
106. Rugs, woollen, cotton, opossum, or other, 20 per cent. *ad valorem.*
107. Shawls, 20 per cent. *ad valorem.*
108. Silks, satins, velvets, plushes, n.o.e., composed of silk mixed with any other material, in the piece, 25 per cent. *ad valorem.*
109. Textile piece-goods other than cotton or silk, 20 per cent. *ad valorem.*
110. Umbrellas, parasols, and sunshades, 20 per cent. *ad valorem.*
111. Yarns n.o.e., 20 per cent. *ad valorem.*

Class VII.—Leather and Manufactures of Leather.

112. Boots, shoes, and slippers, n.o.e; goloshes, clogs, pattens, vamps, uppers, and laces, 22½ per cent. *ad valorem.*
113. Heel-plates, and toe-stiffeners and plates, 22½ per cent. *ad valorem.*
114. Leather—
    Leather belting and belt-leather, harness, bridle, legging, bag, kip (other than East India), 4d. the lb.
    Buff and split, including satin hides and tweeds, 3d. the lb.
    Cordovan, levanted leather, roans, sheepskins, morocco n.o.e., basils, 3d. the lb.
    Sole-leather, 2d. the lb.
    East India kip, Persians, lambskins and goatskins (dressed other than morocco), kangaroo and wallabi skins (dressed), tan and coloured calf, 2d. the lb.
    Leather n.o.e., 1d. the lb.
115. Leather board or compo, 4d. the lb.
116. Leather bags and leather-cloth bags, n.o.e., 20 per cent. *ad valorem.*
117. Leather, chamois, 20 per cent. *ad valorem.*
118. Leather cut into shapes, 22½ per cent. *ad valorem.*
119. Leather leggings, 22½ per cent. *ad valorem.*
120. Leather manufactures n.o.e., 20 per cent. *ad valorem.*
121. Portmanteaux; trunks; travelling-bags and brief-bags of leather or leather-cloth, 10 in. in length and upwards, and carpet-bags, 25 per cent. *ad valorem.*
122. Saddlery and harness, whips and whip-thongs, 20 per cent. *ad valorem.*

Class VIII.—Furniture and Household Furnishings.

123. Basket- and wicker-ware n.o.e., not being furniture, 20 per cent. *ad valorem.*
124. Carpets and druggets; floorcloth; mats and matting, 20 per cent. *ad valorem.*
125. Desks, 20 per cent. *ad valorem.*
126. Furniture and cabinetware, n.o.e., and other than iron, 25 per cent. *ad valorem.*
127. Furniture-, knife-, and plate-powder and polish, 20 per cent. *ad valorem.*
128. Mantelpieces, other than stone, 20 per cent. *ad valorem.*
129. Upholstery n.o.e., 25 per cent. *ad valorem.*

Class IX.—China, Glass, and Earthen Goods.

130. Bricks, known as firebricks, 20 per cent. *ad valorem.*
131. China, porcelain, and parianware, 20 per cent. *ad valorem.*
132. Drainage pipes and tiles, 20 per cent. *ad valorem.*
133. Earthen flooring and garden tiles, 20 per cent. *ad valorem.*
134. Earthenware, stoneware, and brownware, 20 per cent. *ad valorem.*

135. Filters, 20 per cent. *ad valorem.*
136. Fireclay, ground, and fireclay goods, 20 per cent. *ad valorem.*
137. Glass, crown, sheet, and common window, 2s. the 100 superficial feet.
138. Glassware; also plate-glass, and glass polished, coloured, and other kinds n.o.e.; globes and chimneys for lamps, 20 per cent. *ad valorem.*
139. Lamps, lanterns, and lamp-wick, 20 per cent. *ad valorem.*
140. Plate-glass, bevelled or silvered; mirrors and looking-glasses, framed or unframed, 25 per cent. *ad valorem.*

Class X.—Fancy Goods, Musical Instruments, etc.

141. Artificial flies, 25 per cent. *ad valorem.*
142. Cards, playing, 6d. per pack.
143. Clocks, 20 per cent. *ad valorem.*
144. Dressing-cases, 20 per cent. *ad valorem.*
145. Fancy goods, and toys, 20 per cent. *ad valorem.*
146. Fishing tackle, including artificially-baited hooks other than flies, 20 per cent. *ad valorem.*
147. Jewellery; plate, gold or silver; greenstone, cut or polished: 20 per cent. *ad valorem.*
148. Mouldings in the piece, for picture-frames, cornices, or ceilings, 15 per cent. *ad valorem.*
149. Musical instruments of all kinds n.o.e., 20 per cent. *ad valorem.*
150. Oil, perfumed, 25 per cent. *ad valorem.*
151. Papier-maché ware, 20 per cent. *ad valorem.*
152. Perfumery n.o.e., 25 per cent. *ad valorem.*
153. Perfumed spirits and Cologne-water; £1 1s. the liquid gallon until the 1st February, 1896, and thereafter £1 10s. the liquid gallon.
154. Photographic goods n.o.e., 20 per cent. *ad valorem.*
155. Pictures, paintings, drawings, engravings, and photographs, framed or unframed; picture- or photograph-frames and -mounts, 20 per cent. *ad valorem.*
156. Platedware, 20 per cent. *ad valorem.*
157. Statues, statuettes, casts, and bronzes, 20 per cent. *ad valorem.*
158. Tobacco-pipes and cases, cigar- and cigarette-holders and cases, cigarette-papers and -cases, 25 per cent. *ad valorem.*
159. Toilet preparations n.o.e., 25 per cent. *ad valorem.*
160. Watches, 20 per cent. *ad valorem.*
161. Walking-sticks, 20 per cent. *ad valorem.*

Class XI.—Paper Manufactures and Stationery.

162. Calendars and show-cards, all kinds, 25 per cent. *ad valorem.*
163. Cardboard boxes complete, or cardboard cut and shaped for boxes (including match-boxes), 25 per cent. *ad valorem.*
164. Directories of New Zealand, or of any part thereof; also covers for directories, 25 per cent. *ad valorem.*
165. Handbills, programmes, and circulars, playbills and printed posters, 20 per cent. *ad valorem.*
166. Ink, writing, 20 per cent. *ad valorem.*
167. Paper bags, coarse (including sugar-bags), 7s. 6d. the cwt.
168. Paper bags n.o.e., 25 per cent. *ad valorem.*
169. Paper-hangings, 15 per cent. *ad valorem.*
170. Paper, wrapping—viz., blue candle, glazed cap, glazed casings, small hand, lumber hand, and tissue, 5s. the cwt.
171. Paper, wrapping, other kinds, including brown, cartridge, and sugar papers, 5s. the cwt.
172. Printed matter relating to patent or proprietary medicines; trade catalogues, price-lists, and fashion-plates of the goods of firms or persons in the colony, 25 per cent. *ad valorem.*
173. Stationery and writing paper n.o.e., 20 per cent. *ad valorem.*

174. Stationery, manufactured—viz., account-books; manuscript books; bill-head, invoice, and statement forms; printed or ruled paper; counter-books; cheque- and draft-forms; tags; labels; blotting-pads; sketch-books; book covers; copying letter-books; manifold writers; albums (other than for photographs); diaries; birthday-books; plain or faint-lined ruled books; printed window-tickets; printed, lithographed, or embossed stationery; and Christmas, New Year, birthday, and Easter cards and booklets: 25 per cent. *ad valorem.*
175. Stereotypes and matrices, 25 per cent. *ad valorem.*

Class XII.—Manufactures of Metal.

176. Bicycles, tricycles, and the like vehicles; also finished or partly finished or machined parts of same, n.o.e., including weldless steel tubing cut to short lengths, 20 per cent. *ad valorem.*
177. Boilers, land and marine, 20 per cent. *ad valorem.*
178. Brass cocks, valves, unions, lubricators, and whistles, 20 per cent. *ad valorem.*
179. Brass manufactures n.o.e, 20 per cent. *ad valorem.*
180. Cartridges (shot), 10- to 24-bore, 1s. 6d. the 100.
181. Cartridge-cases, 9d. the 100.
182. Cartridges, n.o.e., 20 per cent. *ad valorem.*
183. Cash-registering machines, 10 per cent. *ad valorem.*
184. Coffin-furniture, 20 per cent. *ad valorem.*
185. Composition-piping, 3s. 6d. the cwt.
186. Copper manufactures n.o.e., 20 per cent. *ad valorem.*
187. Copying-presses, 20 per cent. *ad valorem.*
188. Crab-winches, cranes n.o.e., capstans, and windlasses, 20 per cent. *ad valorem.*
189. Cutlery, 20 per cent. *ad valorem.*
190. Firearms, all kinds, 20 per cent. *ad valorem.*
191. Galvanised-iron manufactures n.o.e., 25 per cent. *ad valorem.*
192. Gasometers, and other apparatus for producing gas; also gas-meters, 10 per cent. *ad valorem.*
193. Gaspipes, iron, 5 per cent. *ad valorem.*
194. Hardware, ironmongery, and holloware, 20 per cent. *ad valorem.*
195. Iron bridges, and iron material, n.o.e., for the construction of bridges, wharves, jetties, or patent slips, 20 per cent. *ad valorem.*
196. Iron columns for buildings, and other structural ironwork, 20 per cent. *ad valorem.*
197. Iron doors for safes and vaults, 20 per cent. *ad valorem.*
198. Iron, galvanised corrugated sheets, screws, and nails, 2s. the cwt.
199. Iron galvanised tiles, ridging, guttering, and spouting, 20 per cent. *ad valorem.*
200. Iron gates and gate-posts, staples, standards, straining posts and apparatus, 20 per cent. *ad valorem.*
201. Iron nails, 2s. the cwt.
202. Iron pipes, and fittings for same, including main-cocks, 5 per cent. *ad valorem.*
203. Iron, plain galvanised sheet and hoop, 1s. 6d. the cwt.
204. Iron tanks, exceeding 200 gallons and not exceeding 400 gallons, 10s. each.
205. Iron tanks, of and under 200 gallons, 5s. each.
206. Iron-work and wire-work, 20 per cent. *ad valorem.*
207. Japanned and lacquered metal ware, 25 per cent. *ad valorem.*
208. Lawn-mowers, 20 per cent. *ad valorem.*
209. Lead, in sheets, 1s. 6d. the cwt.
210. Lead piping, 3s. 6d. the cwt.
211. Machinery, n.o.e., 20 per cent. *ad valorem.*
212. Machinery, electric, and appliances, 10 per cent. *ad valorem.*

213. All machinery for agricultural purposes, including chaff-cutters, corn-crushers, corn-shellers, also articles used in manufacturing the same—namely, chaff-cutting knives, tilt-rakes, fittings for threshing-mills, forgings for ploughs; but excluding reapers and binders, 5 per cent. *ad valorem.*
214. Machinery for dairying purposes (excluding separators and coolers), 5 per cent. *ad valorem.*
215. Machinery for flour-mills, woollen-mills, paper-mills, rope- and twine-making, dredging, saw-milling, planing, and wood-working (including lathes), oil-refining, boring, and also machinery for refrigerating or preserving meat, leather-splitting machines, and band-knives for same, 5 per cent. *ad valorem.*
216. Machinery for stamping and blocking tin, 5 per cent. *ad valorem.*
217. Machinery of every description for mining purposes, including machine pumps, but excluding machinery for gold-saving purposes and processes, 5 per cent. *ad valorem.*
218. Manufactures, n.o.e., of metal, or of metal in combination with any other material, 20 per cent. *ad valorem.*
219. Nails n.o.e., 3s. the cwt.
220. Portable engines on four or any greater number of wheels, with boilers of locomotive type; also traction-engines, 5 per cent. *ad valorem.*
221. Printing machines and presses, 5 per cent. *ad valorem.*
222. Pumps and other apparatus for raising water n.o.e., 20 per cent. *ad valorem.*
223. Railway and tramway plant and materials n.o.e., 20 per cent. *ad valorem.*
224. Sad-irons, 20 per cent. *ad valorem.*
225. Shot, 10s. the cwt.
226. Soda-water machines; also machines for aërating liquids, 5 per cent. *ad valorem.*
227. Steam-engines and parts of steam-engines n.o.e., 20 per cent. *ad valorem.*
228. Steam-engines and parts thereof (including the boiler or boilers therefor), imported specially for mining and dairying purposes, 5 per cent. *ad valorem.*
229. Tinware, and tinsmiths' furniture, n.o.e., 25 per cent. *ad valorem.*
230. Waterworks pipes, iron, 5 per cent. *ad valorem.*
231. Weighbridges and weighing-machines, 20 per cent. *ad valorem.*
232. Wire mattresses and webbing, 20 per cent. *ad valorem.*
233. Zinc tiles, ridging, guttering, piping, 20 per cent. *ad valorem.*
234. Zinc manufactures n.o.e., 25 per cent. *ad valorem.*

Class XIII.—Timber and Articles made from Timber.

235. Bellows, other than forge, 20 per cent. *ad valorem.*
236. Blocks, wooden tackle, 20 per cent. *ad valorem.*
237. Buckets and tubs, of wood, 20 per cent. *ad valorem.*
238. Carriages, carts, drays, wagons and perambulators, and wheels for the same, 20 per cent. *ad valorem.*
239. Carriage shafts, spokes, and felloes, dressed: bent carriage timber n.o.e., 20 per cent. *ad valorem.*
240. Doors, glazed with ornamental glass, 4s. each.
241. Doors, plain, 2s. each.
242. Sashes, glazed with ornamental glass, 4s. the pair.
243. Sashes, plain, 2s. the pair.
244. Timber, palings, 2s. the 100.
245. Timber, posts, 8s. the 100.
246. Timber, rails, 4s. the 100.
247. Timber, sawn, dressed, 4s. the 100 ft. superficial.
248. Timber, sawn, rough, 2s. the 100 ft. superficial.
249. Timber, shingles and laths, 2s. the 1,000.
250. Woodenware and turnery n.o.e., and veneers, 20 per cent. *ad valorem.*

Class XIV.—Oils, Paints, etc.

251. Axle-grease and other solid lubricants, 20 per cent. *ad valorem.*
252. Harness oil and composition, and leather dressing, 20 per cent. *ad valorem.*
253. Naphtha, 6d. the gallon.
254. Oil, kerosene, 6d. the gallon.
255. Oil, linseed, 6d. the gallon.
256. Oil, mineral, including shale-waste or unrefined mineral-oil n.o.e., 6d. the gallon.
257. Oil, n.o.e., 6d. the gallon.
258. Oil, olive, in bulk, 6d. the gallon.
259. Oil vegetable, in bulk, n.o.e., 6d. the gallon.
260. Oil, vegetable or other, in bottle, 15 per cent. *ad valorem.*
261. Paints and colours ground in oil or turpentine, 2s. 6d. the cwt.
262. Paints and colours mixed ready for use, 5s. the cwt.
263. Putty, 2s. the cwt.
264. Stearine, 1½d. the lb.
265. Varnish, enamel paints, gold size, 2s. the gallon.
266. Whiting and chalk, 1s. the cwt.

Class XV.—Agricultural and Farm Products, etc.

267. Animals, food for, of all kinds, n.o.e., 20 per cent. *ad valorem.*
268. Cattle (horned), 10s. each.
269. Chaff, £1 the ton.
270. Grain—namely, barley, 2s. the 100 lb.
271. Grain and pulse of every kind n.o.e., 9d. the 100 lb.
272. Grain and pulse of every kind, when ground or in any way manufactured, n.o.e., 1s. the 100 lb.
273. Horses, £1 each.
274. Linseed, £1 the ton.
275. Maize, 9d. the 100 lb.
276. Onions, £1 the ton.
277. Prepared calf-meal, £1 5s. the ton.

Class XVI.—Miscellaneous.

278. Bags, flour, 20 per cent. *ad valorem.*
279. Bags, calico, forfar, hessian, and linen, 20 per cent. *ad valorem.*
280. Bagging and bags n.o.e., 15 per cent. *ad valorem.*
281. Blacking and boot-gloss, 20 per cent. *ad valorem.*
282. Blacklead, 20 per cent. *ad valorem.*
283. Blue, 2d. the lb.
284. Brooms, brushes, and brushware n.o.e., 25 per cent. *ad valorem.*
285. Brushes, hair, and combs; toilet, clothes, and hat brushes, 20 per cent. *ad valorem.*
286. Candles, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
287. Cement, 2s. the barrel.
288. Cordage and rope n.o.e., 20 per cent. *ad valorem.*
289. Cork, cut, including bungs, 20 per cent. *ad valorem.*
290. Fireworks n.o.e., 20 per cent. *ad valorem.*
291. Flock, 10 per cent. *ad valorem.*
292. Glue and size, 1½d. the lb.
293. Granite, sawn on not more than two sides, and not dressed or polished, 5 per cent. *ad valorem.*
294. Marble, granite, and other stone, dressed or polished, and articles made therefrom, including mantelpieces, 25 per cent. *ad valorem.*

295. Matches—
Wooden, in boxes containing not more than 60 matches, 1s. the gross of boxes.
In boxes containing over 60 and not more than 100 matches, 2s. the gross of boxes.
In boxes containing more than 100 matches, for every 100 matches or fraction thereof contained in one box, 2s. the gross of boxes.
Wax, "plaid vestas" in cardboard boxes containing under 100 matches, 1s. 2d. the gross of boxes.
"Pocket vestas" in tin or other boxes containing under 100 matches, 1s. 9d. the gross of boxes.
"Sportsman's," "Ovals," and "No. 4 tin vestas" in boxes containing not more than 200 matches, 5s. the gross of boxes.
Other kinds, for every 100 matches or fraction thereof contained in one box, 2s. 6d. the gross of boxes.
296. Nets and netting, 20 per cent. *ad valorem.*
297. Powder, sporting, 6d. the lb.
298. Rice, manufactured into starch in bond, 2s. the cwt.
299. Sacks, other than cornsacks and jute sacks, 15 per cent. *ad valorem.*
300. Sausage-skins and casings (including brine or salt), 3d. the lb.
301. Soap, common yellow and blue mottled, 5s. the cwt.
302. Soap n.o.e. 25 per cent. *ad valorem.*
303. Soap-powder, extract of soap, dry soap, and soft-soap, 20 per cent. *ad valorem.*
304. Spirits, methylated, 1s. the liquid gallon.
305. Spirits, cleared from warehouse, methylated under prescribed conditions, 6d. the liquid gallon.
306. Starch, 2d. the lb.
307. Tarpaulins, tents, rick- and wagon-covers, 20 per cent. *ad valorem.*
308. Twine, n.o.e., 20 per cent. *ad valorem.*
309. Washing-powder, 20 per cent. *ad valorem.*
310. Wax, paraffin, mineral, vegetable, and Japanese, 1½d. the lb.

In addition to any duty chargeable by law on any goods imported into the colony, a further duty of 20 per cent. *ad valorem* shall be charged when the goods are prison-made.

Table of Exemptions from Duties of Customs.

Class I.—Foods, etc.

Names of Articles.

311. Almonds, Barbary, Sicily, and French, used in confectioners' manufactures.
312. Anchovies, salted, in casks.
313. Arrowroot, sago, tapioca, macaroni, vermicelli, and prepared groats.
314. Rock salt.

Class IV.—Non-alcoholic Beverages, etc.

315. Cocoa-beans.

Class V.—Drugs, etc.

316. Acids—viz.: boracic; carbolic, in bulk; fluoric; muriatic; nitric; oxalic; oleic; pyrogallic; salicylic; sulphuric.
317. Concentrated extracts, or essences in liquid form or preserved in fat for perfume-manufacturing purposes in manufacturing warehouses, in bottles of not less than 1 lb. in weight.
318. Disinfectants.

319. Drugs and chemicals—viz.: alum; sulphate of aluminium; sulphate of ammonia; anhydrous ammonia; aniline dyes; arsenic, bluestone, or sulphate of copper; borax; catechu; chloride of calcium; nitrate of silver; cochineal; creosote, crude or commercial; glycerine, crude; gum, arabic and tragacanth; gum benzoin; artificial gum arabic; gum damar; phosphorus; potash, caustic potash, and chlorate of potash; pearlash; cyanide of potassium; sal-ammoniac; saltpetre; acetate of soda, crude; soda-ash; caustic soda; nitrate of soda; silicate of soda, sulphate of soda; sulphide of sodium; strychnine; sulphur; chloride of zinc; iron-sulphates; gall-nuts; turmeric; saffron; nitrous-oxide gas; tree washes; insecticides; maltine; chlorodyne.
320. Essential oils, except eucalyptus; cod-liver oil; oil of rhodium.
321. Horse-drenches.
322. Medicinal barks, leaves, herbs, flowers, roots, and gums.
323. Scrub-exterminator.
324. Sheep-dip; sheep-drenches; sheep-licks.
325. Surgical and dental instruments and appliances.
326. Scientific and assay balances, retorts, flasks, and other appliances for chemical analysis and assay work.
327. Water-hardening chemicals for brewers' use.

CLASS VI.—CLOTHING AND TEXTILES.

328. Accoutrements for military purposes, excepting uniform clothing.
329. Brace-elastic and brace mountings.
330. Bunting, in the piece.
331. Butter- and cheese-cloth.
332. Buttons, tapes, wadding, pins, needles.
333. Calico, white and grey, also cotton sheetings, in the piece.
334. Corduroy, moleskin, and plain beaverskin, of cotton, in the piece.
335. Coloured cotton shirtings; flannelette shirtings.*
336. Forfar, dowlas, and flax sheeting, when cut up under supervision in sizes not exceeding 47 in. x 36 in. for making flour-bags, and not exceeding 54 in. for lining wool mats.
337. Fur-skins, green or sun-dried.
338. Gold or silver lace or braid for military clothing.
339. Hatmaker's materials—viz.: silk plush; felt hoods; shellac; galloons; calicoes; spale-boards for hat-boxes; leathers and linings; blocks; moulds; frames; ventilators; and tassels.
340. Hessians, plain or striped, and scrim.
341. Leather-cloth.
342. Minor articles (required in the making-up of apparel, boots, shoes, hats, caps, saddlery, umbrellas, parasols, and sunshades), enumerated in any order of the Commissioner, and published in the *Gazette*.
343. Sailcloth, canvas, and unbleached double-warped duck, in the piece.
344. Sewing cottons, silks, and threads; crotchet, darning, and knitting cottons; angola mendings not exceeding 45 yards, on cards.
345. Silk for flour-dressing.
346. Silk twist (shoemakers' and saddlers').
347. Staymakers' binding, eyelets, corset-fasteners, jean, ticks, lasting, sateen, and cotell.
348. Tailors' trimmings—viz.: plain-coloured imitation hair-cloth; canvas; plain Verona and plain diagonal, and such patterns of checked Italian cloth as may be approved of by the Commissioner of Customs; Italian cloth of cotton or wool; buckram; wadding and padding; silk, worsted, and cotton bindings and braids; stay-bindings; Russia braids; shoulder-pads; buckles; silesias; drab, slate, and brown jeans; pocketings; slate, black, and brown dyed unions and linens.

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* See note on next page.

349. Umbrella-makers' materials—viz.: reversible and levantine silk mixtures, gloria, and satin de chêne of not less than 44 in. in width; alpaca cloth, with border; zanella cloth, with border; also other piece-goods on such conditions as the Commissioner may approve; sticks, runners, notches, caps, ferrules, cups, ribs, stretchers, tips, and rings.
350. Union shirtings the invoice value of which does not exceed 6d. the yard.*
351. Waterproof material in the piece.

Class VII.—Leather, and Articles used in Leather Manufactures.

352. Boot-elastic.
353. Bootmakers' linings, canvas, plain or coloured, bag and portmanteau linings, of such materials, qualities, and patterns as may be approved by the Commissioner.
354. Boots, shoes, and slippers—viz., children's, Nos. 0 to 3.
355. Cork soles, and sock soles.
356. East India kip, crust or rough-tanned, but undressed.
357. Goatskins, crust or rough-tanned, but undressed.
358. Grindery, except heel- and toe-plates.
359. Hogskins.
360. Kangaroo-, wallabi-skins, undressed.
361. Leather, japanned or enamelled; goatskins, dressed as morocco, coloured (other than black).
362. Saddle-trees.
363. Saddlers' ironmongery (except bits and stirrup-irons), hames, and mounts for harness; straining, surcingle, brace, girth, and roller-webs; collar-check, and the same article plain, of such quality as may be approved by the Commissioner; legging-buckles.
364. Tanning materials, crude.

Class VIII.—Furniture, etc.

365. Blind-webbing and tape.
366. Upholsterers' webbing, hair-seating, imitation hair-seating, curled hair; gimp and cord, of wool, cotton, or silk; tufts and studs.

Class IX.—China, Glass, etc.

367. Bottles, empty, plain glass, not being cut or ground; also jars up to 3 in. in diameter at the mouth.
368. Glass plates (engraved) for photo-lithographic work.
369. Jars or other dutiable vessels, containing free goods or goods subject to a fixed rate of duty, and being ordinary trade packages for the goods contained in them.

Class X.—Fancy Goods, etc.

370. Action-work and keys, in frames or otherwise, for manufacture of organs, harmoniums, and pianos; organ-pipes and stop-knobs.
371. Artists' canvas, colours, brushes, and pallet-knives.
372. Magic-lanterns, lenses, and slides.
373. Microscopes and astronomical telescopes, and lenses for same.
374. Musical instruments, specially imported for Volunteer bands.
375. Paintings, statuary, and works of art, presented to or imported by any public institution or art association registered as a body corporate, for display in the buildings of such institution or association, and not to be sold or otherwise disposed of.

* Whenever any dispute arises as to the application of the exemption in favour of coloured cotton, flannelette, or union shirtings, in the case of fabrics alleged to be such shirtings, the Commissioner has power to decide such dispute: and in case of doubt on his part, he may require the fabric in dispute to be cut up for shirt-making, under such conditions as he prescribes.

376. Photographic cameras and lenses.
377. Photographs of personal friends in letters or packets.
378. Precious stones, cut or uncut and unmounted.
379. Sensitized surfaces for photographic purposes.

CLASS XI.—PAPER, ETC.

380. Bookbinders' materials—viz., cloth, leather, thread, headbands, webbing, end-papers, tacketing-gut, marbling-colours, marble-paper, blue-paste for ruling-ink, staple-presses, wire-staples, staple-sticks.
381. Butter-paper, known as parchment paper or waxed paper.
382. Cardboard and pasteboard, of sizes not less than that known as "royal."
383. Cardboard boxes, materials for—viz., gold and silver paper, plain and embossed, gelatine and coloured papers, known as "box-papers."
384. Cartridge paper, for drawing-books.
385. Cloth-lined boards, not less than "royal."
386. Cloth-lined papers; enamelled-paper; ivorite and gelatine; metallic paper, not less than "demy."
387. Copy-books and drawing-books.
388. Copying-paper, medium and double-foolscap, in original mill wrappers and labels.
389. Hand-made cheque-paper.
390. Ink, printing.
391. Masticated para.
392. Millboard and bookbinders' leather-board.
393. Paper, hand-made or machine-made book or writing, of sizes not less than the size known as "demy," when in original wrappers.
394. Printing-paper.
395. Printed books, papers, and music n.o.e.
396. School slates, and educational apparatus.

CLASS XII.—METALS.

397. Anchors.
398. Artificers' tools.
399. Axes and hatchets; spades, shovels, and forks; picks; mattocks; quartz and knapping-hammers; scythes, sheep-shears, reaping-hooks; soldering-irons, paperhangers' scissors; butchers' saws and cleavers.
400. Axles, axle-arms, and boxes.
401. Band-saws and folding-saws, including frames.
402. Bellows nails.
403. Bicycles and tricycles, fittings for—viz., rubber-tires, pneumatic-tires, outside covers, and inner tubes; rubber and cork handles, and pedal-rubbers; also drop-forgings and stampings, ball-bearings, weldless steel tube in full lengths, rims, forks, and spokes, in the rough.
404. Blacksmiths' anvils, forges, and fans.
405. Bolts, 5in. by ½in. in diameter, and under, and nuts for same.
406. Brass and copper, in pigs, bars, tubes, or sheets.
407. Brass-tubing and stamped work, in the rough, for gasaliers and brackets.
408. Caps, percussion.
409. Card-clothing for woollen-mills.
410. Chains, trace and plough chains; or metal articles required to repair or complete riding or driving harness or saddlery to be repaired or made in the colony.
411. Copper and composition rod, bolts, sheathing, and nails.
412. Couch-roll jackets, machine-wires, beater-bars, and strainer-plates for paper-mills.
413. Crucibles.
414. Emery-grinding machines and emery-wheels.
415. Empty iron drums, not exceeding 10 gallons capacity.
416. Engineers' machine tools.
417. Eyelets.

418. Fire-engines, including Merryweather's chemical fire-engines.
419. Fish-hooks.
420. Galvanising-baths, welded.
421. Gas-engines and hammers, and oil-engines.
422. Glassmakers' moulds.
423. Hydraulic cranes.
424. Iron- and brass-wove wire and wire-gauze; also wire netting.
425. Iron boiler-plates and unflanged end-plates for boilers; boiler-tubes not exceeding 6in. in diameter, and unflanged; Bowling's expansion rings; furnace-flues.
426. Iron, plain black sheet, rod, bolt, bar, plate, hoop, and pig.
427. Iron rolled girders.
428. Iron plates, screws, and castings for ships.
429. Iron wire n.o.e., including fencing-wire, plain and barbed.
430. Lead, in pigs and bars.
431. Locomotives.
432. Machine saws.
433. Machinery for gold-saving purposes and processes.
434. Metal fittings for trunks, portmanteaux, travelling-bags, leggings, bags, and satchels.
435. Metal sheaves for blocks.
436. Metallic capsules.
437. Perambulators and the like vehicles, fittings for, n.o.e.
438. Perforated or cellular sheet zinc or iron.
439. Printing type and materials n.o.e.
440. Rails for railways and tramways.
441. Reapers and binders, and reaping and mowing machines, and extra parts for same; materials for manufacturing agricultural machinery—namely, reaper-knife sections, fingers, brass and steel springs, malleable castings, discs for harrows, mould-boards and plough-shares, mould-board plates, and steel share-plates cut to pattern, skeith-plates; ploughs and harrows; combined threshers.
442. Riddles and sieves.
443. Rivets and washers.
444. Separators and coolers for dairying purposes.
445. Set-screws, engineers' studs, and split-pins.
446. Sewing-, knitting-, and kilting-machines.
447. Spiral springs (except sofa- and mattress-springs).
448. Steam and hydraulic pressure and vacuum gauges.
449. Surveyors' steel bands and measuring-tapes.
450. Swords.
451. Tacks of all kinds.
452. Tea-packing lead.
453. Tin, in pigs, bars, or sheets.
454. Tinsmiths' fittings, including stamped or blocked tin, planished or unplanished.
455. Tins, tops of, ornamented.
456. Wire, of brass, copper, or lead.
457. Zinc, plain sheet.
458. Zinc plates and copper plates for photo-lithographic work.

Class XIII.—Timber, etc.

459. Ash, hickory, and lancewood timber, unwrought.
460. Blacksmiths' bellows.
461. Brush woodware.
462. Carriage- and cart-shafts, spokes and felloes in the rough; hubs, all kinds; poles if unbent and unplaned, all kinds; bent wheel-rims.
463. Carriage- and cart-makers' materials—viz., springs, mountings, trimmings, brass hinges, tire-bolts, shackle-holders, step treads, and other iron fittings (except steps, lamp-irons, dash-irons, seat-rails, and fifth wheels), rubber-cloth.

464. Churns.
465. Lignum-vitæ.
466. Sieves, hair.
467. Wooden handles for tools.

CLASS XIV.—OILS, ETC.

468. Benzine in bulk.
469. Oils—viz., candlenut, fish, whale, seal, penguin, and palm.
470. Paints and colours n.o.e.
471. Shale oil, once run, suitable for gas-making.
472. Spirits of tar.
473. Turpentine, driers, and terebene.

CLASS XV.—MISCELLANEOUS.

474. Apparatus and appliances solely for teaching purposes, as may be approved by the Commissioner.
475. Belting for machinery, other than leather.
476. Binder-twine.
477. Bricks, other than fire-bricks.
478. Building materials n.o.e.
479. Brushes for cream-separators and combined screens.
480. Candlenuts and candlenut kernels.
481. Candlewick.
482. Canvas aprons and elevators for reapers and binders.
483. Carpenters' baskets.
484. Charts and maps.
485. Cotton waste.
486. Dye-stuffs and dyeing materials, crude.
487. Felt sheathing.
488. Food preservative n.o.e.
489. Gum boots.
490. Hawsers of 12 in. and over.
491. Honey and brown Windsor soap composition.
492. Iron and steel cordage.
493. Jute bagging, bags, and sacks.
494. Manures.
495. Marble and other stone, hewn or rough-sawn, not dressed or polished.
496. Netmakers' cotton twine.
497. Official supplies for consular officers of countries where a similar exemption exists in favour of British Consuls.
498. Papermakers' felts.
499. Passengers' baggage and effects, including only wearing apparel and other personal effects that have been worn or are in use by persons arriving in the colony; also implements, instruments, and tools of trade, occupation, or employment of such persons; and household or other effects not exceeding £100 in value, which have been in use for twelve months prior to embarkation by the persons or families bringing them to the colony, and not intended for any other person or persons or for sale; also cabin furnishings belonging to such persons.
500. Plaster of Paris.
501. Powder, blasting and meal.
502. Ship-chandlery n.o.e.
503. Ships' rockets, blue-lights, and danger-signals.
504. Spirits for manufacturing perfumed spirit, flavouring essences, and culinary essences in manufacturing warehouses.*
505. Stones, mill, grind, oil, and whet.

* This exemption ceased on the 1st day of February, 1896.

506. Tobacco for sheepwash or for insecticide, after being rendered unfit for human consumption to the satisfaction of the Commissioner.
507. Treacle or molasses, mixed with bone-black in proportions to the satisfaction of the Commissioner.
508. Tubular woven cotton-cloth in the piece, for meat-wraps.
509. Type-writers.
510. Wax, bottling.
511. Woolpacks and woolpockets.
512. Yarn—viz., coir, flax, hemp.
513. Articles and materials (as may from time to time be specified by the Commissioner) which are suited only for, and are to be used solely in, the fabrication of goods within the colony. All decisions of the Commissioner in reference to articles so admitted free to be published from time to time in the *Gazette*.
514. And all articles not otherwise enumerated.

Table of Excise Duties.

515. Tobacco, 1s. in the lb.*
516. Cigars, cigarettes, and snuff, 1s. 6d. the lb.*
517. Beer, 3d. the gallon.
518. Articles in which spirit is a necessary ingredient, manufactured in a warehouse appointed under section 26 of "The Customs Laws Consolidation Act, 1882," namely,—
    Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing more than 50 per cent. of proof spirit, 9d. the lb.
    Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing less than 50 per cent. of proof spirit, 3d. the pound.
    Culinary and flavouring essences, 12s. the liquid gallon, from 1st February, 1896.
    Perfumed spirit, 20s. the liquid gallon, from 1st February, 1896.
    Toilet preparations which are subject to 16s. the liquid gallon on importation, 12s. the liquid gallon.
    Toilet preparations which are subject to 25 per cent. duty on importation, 6s. the liquid gallon.

Duties imposed by His Excellency the Governor under Section 17 of "The Customs and Excise Duties Act, 1888."

519. Olive stones, ground (see *New Zealand Gazette*, 15th May, 1890), 4d. the lb.
520. Brewers' caramel (see *New Zealand Gazette*, 21st August, 1890), 3d. the lb.
521. Liquid hops (see *New Zealand Gazette*, 21st December, 1893), 6s. the lb.
522. The United Asbestos Patent Salamander Decorations (see *New Zealand Gazette*, 14th May, 1896), 15 per cent. *ad valorem*.

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* "The Tobacco Excise Duties Act, 1896," section 2, enacts:—

"On and after the thirty-first day of December, one thousand eight hundred and ninety-six, section three of "The Customs and Excise Duties Act, 1891," shall be deemed to be repealed, and in lieu of the duties imposed by that section there shall be levied, collected, and paid, on and after that day, upon tobacco manufactured in the colony, at the time of making the entry for home consumption thereof, the several duties of excise following, that is to say,—

"On tobacco	One shilling the pound,
"On cigars and snuff	One shilling and sixpence the pound.
"On cigarettes—	
If manufactured by machinery	Two shillings and sixpence the pound.
If made by hand	One shilling the pound."

NEW ZEALAND NEWSPAPERS.

THERE are (January, 1897) 205 publications on the register of newspapers for New Zealand. Of these, 54 are daily papers, 24 are published three times a week, 31 twice a week, 64 once a week, 4 fortnightly, and 28 monthly.

The names of the newspapers, with the postal districts and towns in which they are printed, are given in the following list, the second column showing the day or period of publication. M. signifies morning paper; E. evening paper:—

AUCKLAND.

Auckland—	
Auckland Evening Star (E.)	Daily.
Auckland Weekly News and Town and Country Journal (M)	Saturday
Bible Standard (M.)	Monthly.
Church Gazette (M.)	"
Forward (M.)	Saturday.
Helping Hand	Monthly.
Liberty (M.)	"
Mining Standard (M.)	Tuesday, Friday.
New Zealand A B C Guide	Monthly.
New Zealand Farmer, Bee and Poultry Journal (M.)	"
New Zealand Graphic, Ladies' Journal, and Youths' Companion	Wednesday.
New Zealand Herald (M.)	Daily.
Observer (M.)	Saturday.
Produce Circular and Monthly Report (M.)	Monthly.
Searchlight (M.)	Saturday.
Sharland's Trade Journal	"
Sporting Review	Thursday, Sat.
Coromandel—	
Coromandel County News (E.)	Mon., Wed., Fri.
Coromandel Sun (M.)	Wed., Saturday.
Dargaville—	
Wairoa Bell and Northern Advertiser (M.)	Friday.
Hamilton—	
Waikato Argus (M.)	Tu., Th., Sat.
Waikato Times and Thames Valley Gazette (M.)	Tu., Th., Sat.
Kawakawa—	
Northern Luminary (M.)	Saturday.
Rotorua—	
Hot Lakes Chronicle (E.)	Saturday.
Whangarei—	
Northern Advocate (E.)	Friday.

THAMES.

Opotiki—	
Korimako Hou	Monthly.
Opotiki Herald, Whakatane County and East Coast Gazette (E.)	Tuesday, Friday.
Paeroa—	
Hauraki Tribune and Thames Valley Advertiser (M.	Tu., Th., Sat.
Ohinemuri Gazette (M.)	Wed., Saturday.
Tauranga—	
Bay of Plenty Times and Thames Valley Warden (E.)	Mon., Wed., Fri.
Te Aroha—	
Te Aroha and Ohinemuri News and Upper Thames Advocate (M.)	Wed., Saturday.
Te Aroha Times and Waiorongomai Advocate (M.)	Saturday.

Thames—	
Despatch (M.)	Saturday.
Thames Star (E.)	Daily.
Thames Advertiser and Miners' News (M.)	"
Waihi—	
Waihi Miner and Hauraki Goldfield Gazette (E.)	Tuesday, Friday.

GISBORNE.

Gisborne—	
Poverty Bay Herald (E.)	Daily.
Telephone (M.)	Saturday.

NEW PLYMOUTH.

Inglewood—	
Record and Waitara Age (M.)	Wed., Saturday.
Weekly Record (M.)	Saturday.
New Plymouth—	
Budget and Taranaki Weekly Herald (M.)	"
Daily News (M.)	Daily.
Taranaki Herald (E.)	"
Taranaki News (M.)	Saturday.
Opunake—	
Opunake Times (E.)	Tuesday, Friday.
Stratford—	
Egmont Post (E.)	Tu., Th., Sat.
Egmont Settler (E.)	Daily.
Waitara—	
Waitara Times and Clifton County Gazette (M.)	Mon., Wed., Fri.

NAPIER.

Dannevirke—	
Bush Advocate (E.)	Tues., Thur., Sat.
Hastings—	
Hastings Standard (E.)	Daily.
Napier—	
Daily Telegraph (E.)	Daily.
Evening News and Hawke's Bay Advertiser (E.)	"
Hawke's Bay Herald (M.)	"
Hawke's Bay Weekly Courier (M.)	Friday.
New Zealand Fire and Ambulance Record	Monthly.
Waipawa—	
Waipawa Mail (E.)	Tues., Thur., Sat.
Wairoa—	
Wairoa Guardian and County Advocate (M.)	Wed., Saturday.

WANGANUI.

Eltham—	
Eltham Guardian; Kaponga, Ngaire, Te Roti, Hawera, Stratford, and Cardiff Advertiser (M.)	Mon., Wed., Fri.
Hawera—	
Egmont Star (M.)	Saturday.
Hawera and Normanby Star, Patea County Chronicle, and Waimate Plains Gazette (E.)	Daily.
Hawera Morning Post, Patea, Normanby, Eltham, Stratford, Kaponga, Manaia, and Opunake Register (M.)	"
Hunterville—	
Paraekaretu Express, Hunterville, Ohingaiti, Moawhango, and Rata Advertiser (M.)	Tuesday, Friday.
Manaia—	
Waimate Witness (E.)	Tuesday, Friday.
Marton—	
Rangitikei Advocate and Manawatu Argus (E.)	Daily.

Patea—
Patea County Press (E.) .. .. Mon., Wed., Fri.
Wanganui—
Wanganui Chronicle and Patea-Rangitikei Advertiser (M.) .. Daily.
Wanganui Herald (E.) .. .. "
Weekly Chronicle and Patea-Rangitikei Record (M.) .. Saturday.
Yeoman (M.) .. .. Friday.

WELLINGTON.

Carterton—
Wairarapa Observer, Featherston Chronicle, East Coast Advertiser, and South County Gazette (E.) .. .. Tues., Thur., Sat.
Eketahuna—
Eketahuna Express and North Wairarapa Courier (M.) .. Wed., Sat.
Feilding—
Feilding Star (E.) .. .. Daily.
Foxton—
Foxton Telegraph and West Coast Advertiser (E.) .. Mon., Wed., Fri.
Manawatu Herald (E.) .. .. Tues., Thur., Sat.
Greytown—
Wairarapa Standard (E.) .. .. Mon., Wed., Fri.
Levin—
Levin and Manukau Express and Horowhenua County Advertiser (E.) .. .. Tuesday, Friday.
Masterton—
Eketahuna and Pahiatua Mail (M.) .. .. .. Daily.
Wairarapa Daily Times (E.) .. .. .. "
Wairarapa Star (E.) .. .. "
Wairarapa Weekly Times (E.) .. .. .. Wednesday.
Weekly Star and Wellington District Advertiser (M.) .. Thursday.
Otaki—
West Coast Mail and Horowhenua County Advertiser (M.) .. Tuesday, Friday.
Pahiatua—
Pahiatua Herald (E.) .. .. Mon., Wed., Fri.
Palmerston North—
Manawatu Daily Standard, Rangitikei Advertiser, and West Coast Gazette (M.) .. .. Daily.
Manawatu Daily Times (E.) .. .. .. "
Manawatu Weekly, and Oroua and Rangitikei Record (M.) .. Thursday.
Petone—
Hutt and Petone Chronicle (M.) .. .. .. Wednesday.
Shannon—
Manawatu Farmer and Horowhenua County Chronicle (E.) Mon., Wed., Fri.
Wellington—
Church Chronicle (M.) .. .. Monthly.
Echo (E.) .. .. Daily.
Evening Post (E.) .. .. "
Guardian (E.) .. .. Th., fortnightly.
New Zealand Craftsman (M.) .. .. .. Monthly.
New Zealand Dairyman and Dairy Messenger (E.) .. "
New Zealand Field (M.) .. .. Friday.
New Zealand Mail, Town and Country Advertiser (M) .. Friday.
New Zealand's European Mail News (E.) .. .. Monthly.
New Zealand Times (M.) .. .. Daily.
People, Weekly Herald, and New Zealand Fancier (M.) .. Saturday.
Register and Property Investors' Guide .. .. Monthly.
Typo .. .. Monthly.
Wellington Price Current and New Zealand Trade Review (M) .. .. Monthly.
X Rays (M.) .. .. Saturday.
Woodville—
Woodville Examiner (E.) .. .. Mon., Wed. Fri.

	BLENHEIM.	
Blenheim—		
Evening Star (E.)		Saturday.
Marlborough Daily Times and Town and Country Advertiser (M.)		Daily.
Marlborough Express (E.)		"
Havelock—		
Pelorus Guardian and Miners' Advocate (M.)		Tuesday, Friday.
Kaikoura—		
Kaikoura Star and North Canterbury and South Marlborough News (E.)		" "
Picton—		
Marlborough Press, County of Sounds Gazette (M.)		" "
	NELSON.	
Collingwood—		
Golden Bay Argus (E.)		Thursday.
Nelson—		
Colonist (M.)		Daily.
Nelson Evening Mail (E.)		"
Nelson Evening Star (E.)		"
Takaka—		
Takaka News and Collingwood Advertiser (E.)		Thursday.
	WESTPORT.	
Charleston—		
Charleston Herald, Brighton Times, and Croninville Reporter (M.)		Wed., Saturday.
Fern Flat—		
Buller Post (E.)		Thursday.
Lyell—		
Lyell Times and Central Buller Gazette (M.)		Saturday.
Westport—		
Buller Miner (M.)		Friday.
Westport News (M.)		Daily.
Westport Times and Evening Star (E.)		"
	GREYMOUTH.	
Brunnerton—		
Brunner News, Blackball Courier, and Grey Valley Advertiser (E.)		Daily.
Greymouth—		
Evening Star and Brunnerton Advocate (E.)		"
Grey River Argus (M.)		"
Weekly Argus (M.)		Weekly.
Reefton—		
Inangahua Herald and New Zealand Miner (M.)		Daily.
Inangahua Times and Reefton Guardian (E.)		"
	HOKITIKA.	
Hokitika—		
Hokitika Guardian and Evening Star (E.)		Daily.
Leader (M.)		Thursday.
West Coast Times (M.)		Daily.
Kumara—		
Kumara Times and Dillman's and Goldsborough Advertiser (E.)		"
Ross—		
Ross and Okarito Advocate and Westland Advertiser (M.)		Wed., Saturday.
	CHRISTCHURCH.	
Akaroa—		
Akaroa Mail and Banks Peninsula Advertiser (M.)		Tuesday, Friday.
Ashburton—		
Ashburton Guardian (E.)		Daily.

Ashburton—*continued.*	
Ashburton Mail, Rakaia, Mount Somers, and Alford Forest Advertiser (M.)	Tues., Thur., Sat.
Ashburton Standard and Farmers' Advocate (M.)	Mon., Wed., Fri.
Christchurch—	
Canterbury Times (M.)	Wednesday.
Lyttelton Times (M.)	Daily.
Mercantile and Bankruptcy Gazette of New Zealand (E)	Wednesday.
New Zealand Baptist	Monthly.
New Zealand Church News (M.)	"
New Zealand Railway Review	"
New Zealand Schoolmaster (E.)	"
New Zealand Volunteer and Civil Service Gazette and Naval and Military Chronicle (M.)	"
New Zealand War Cry and Official Gazette of the Salvation Army (M.)	Saturday.*
New Zealand Wheelman	Fortnightly, Sat.
Press (M.)	Daily.
Prohibitionist	Fortnightly, Sat.
Southern Queen (M.)	Monthly.
Spectator (M.)	Friday.
Star (E.)	Daily.
Truth (E.)	Daily.
Weekly Press (M.)	Wednesday.
Oxford (East)—	
Oxford and Cust Observer (M.)	Saturday.
Rangiora—	
Rangiora Standard and North Canterbury Guardian (M.)	Wed., Saturday.
Southbridge—	
Ellesmere Guardian (M.)	" "

TIMARU.

Temuka—	
Geraldine Guardian (M.)	Tues., Thur., Sat.
Temuka Leader (M.)	" " "
Timaru—	
South Canterbury Times (E.)	Daily.
Timaru Herald (M.)	"
Waimate—	
Waimate Times (M.)	Wed., Saturday.

OAMARU.

Oamaru—	
North Otago Times (M.)	Daily.
Oamaru Mail (E.)	"

DUNEDIN.

Alexandra South—	
Alexandra Herald and Central Otago Gazette (M.)	Thursday.
Balclutha—	
Clutha Leader (M.)	Friday.
Free Press (M.)	"
Clinton—	
Clutha County Gazette, Popotunoa Chronicle, and Clinton Advertiser (M.)	"
Clyde—	
Dunstan Times, Vincent County Gazette, and General Goldfields Advertiser (M.)	"
Cromwell—	
Cromwell Argus and Northern Goldfields Gazette (M.)	Tuesday.

* The War Cry receives Press telegrams at evening rates on Monday.

Dunedin—	
Advocate (M.)	Saturday.
Christian Outlook (M.)	"
Democrat (M.)	Thursday.
Evening Star (E.)	Daily.
Farmers' Circular (M.)	Thursday, fortnightly.
Katipo	Monthly.
New Zealand Insurance, Finance, and Mining Journal (M.)	"
New Zealand Mining Journal and Financial Guide (M.)	"
New Zealand Tablet (M.)	Friday.
Otago Daily Times (M.)	Daily.
Otago Witness (M.)	Thursday.
Otago Workman, Dunedin and Suburban Advertiser (M)	Saturday.
Phonographic Magazine and Typewriting News	Monthly.
Temperance Standard	"
Triad (M.)	"
Weekly Budget (M.)	Saturday.
Lawrence—	
Tuapeka Recorder (M.)	Friday.
Tuapeka Times (M.)	Wed., Saturday.
Milton—	
Bruce Herald (M.)	Tuesday, Friday.
Mosgiel—	
Taieri Advocate (M.)	Wed., Saturday.
Naseby—	
Mount Ida Chronicle (Thurs. E. and Sat. M.)	Thur., Saturday.
Palmerston—	
Palmerston and Waikouaiti Times (M.)	Friday.
Roxburgh—	
Mount Benger Mail (M.)	Saturday.
Tapanui—	
Tapanui Courier and Central Districts Gazette (M.)	Wednesday.

INVERCARGILL.

Arrowtown—	
Lake County Press (E.)	Thursday.
Gore—	
Mataura Ensign (E.)	Tues., Th., Sat.
Southern Standard (M.)	Tuesday, Friday.
Invercargill—	
Southern Cross (E.)	Saturday.
Southlander (M.)	Friday.
Southland Daily News (E.)	Daily.
Southland Times (M.)	"
Weekly Times (M.)	Friday.
Queenstown—	
Lake Wakatipu Mail (E.)	"
Riverton—	
Western Star and Wallace County Gazette (M.)	Wed., Saturday.
Wyndham—	
Wyndham Farmer (M.)	Mon., Wed., Fri.
Wyndham Herald (M.)	Wed., Friday.

The foregoing towns are arranged according to the postal district in which they are situated.

Taking the provincial districts, Auckland has 38 publications registered as newspapers, Taranaki 10, Hawke's Bay 9, Wellington 47, Marlborough 6, Nelson 11, Westland 11, Canterbury 29, and Otago 44.

PART II.—STATISTICAL INFORMATION.

[The progress of the colony from the beginning is shown in the statistical broadsheets which follow the General Index.]

SECTION I.—POPULATION.

THE estimated population of New Zealand on the 31st December, 1896, with the increase from the 12th April, on which date the census was taken, is shown below:

	Persons.	Males.	Females.
Population, as enumerated at the census of 12th April, 1896 (exclusive of Maoris)	703,360	371,415	331,945
Estimated increase from 12th April:—			
By excess of births over deaths	8,822	4,176	4,646
Excess of arrivals over departures	1,980	1,396	584
Estimated population, exclusive of Maoris, on 31st December, 1896	714,162	376,987	337,175
Maori population (1896)	39,854	21,673	18,181
Total estimated population of Colony on 31st December, 1896	754,016	398,660	355,356

The number of the Chinese in New Zealand at the end of the year 1896 was 3,729 persons, of whom 28 were females.

While the increase of population between the 12th April and the 31st December is shown to have been 10,802 persons, the increase for the whole year amounted to 13,652 persons, of which 12,180 formed the excess of births over deaths, or natural increase, and 1,472 comprised the excess of arrivals from over seas above the number of departures from the colony.

During the first two quarters of the year the population only increased by 4,256 persons. In the March quarter the departures exceeded the arrivals, causing a decrease of 290, and in the June quarter the position was still unsatisfactory, the departures being 1,378 in excess of the arrivals. During the September quarter the tide turned, and arrivals showed 313 over departures. In the December quarter the net gain by arrivals was no less than 2,827 persons. A table is given to show these movements:—

INCREASE OF POPULATION IN EACH QUARTER, 1896.

Increase from:	Total.	Males.	Females.
First Quarter.			
Excess of births over deaths	2,967	1,376	1,591
Excess of departures over arrivals (decrease)	−290	−154	−136
	2,677	1,222	1,455
Second Quarter.			
Excess of births over deaths	2,957	1,378	1,579
Excess of departures over arrivals (decrease)	−1,378	−866	−512
	1,579	512	1,067

Increase from:	Total.	Males.	Females.
Third Quarter.			
Excess of births over deaths	3,164	1,460	1,704
Excess of arrivals over departures.. ..	313	302	11
	3,477	1,762	1,715
Fourth Quarter.			
Excess of births over deaths	3,092	1,519	1,573
Excess of arrivals over departures.. ..	2,827	1,831	996
	5,919	3,350	2,569
Year 1896.			
Excess of births over deaths	12,180	5,733	6,447
Excess of arrivals over departures.. ..	1,472	1,113	359
	13,652	6,846	6,806

The total population of European descent (714,162 persons) at the end of 1896 was distributed among the provincial districts as under :—

ESTIMATED POPULATION IN PROVINCIAL DISTRICTS, 31ST DEC., 1896.

	Persons.		Persons.
Auckland	155,940	Canterbury	137,867
Taranaki	31,833	Otago	166,160
Hawke's Bay	34,709	Chatham Islands	240
Wellington	123,930	Kermadec Islands	7
Marlborough	12,677		
Nelson	36,201		714,162
Westland	14,598		

The population of the colony (exclusive of Maoris), as returned in the census schedules for the night of the 12th April, 1896, was 703,360 persons, of whom 3,711 were Chinese, and 2,259 half-castes living amongst and as Europeans.

A census of the Maori population was taken during February of 1896, when the number of the Native race was found to be 39,854 persons, including 3,503 half-castes living as Maoris. 229 Maori women were returned as married to European husbands. The complete population (European and Maori) of the colony was therefore 743,214 persons, as exhibited in the following statement, specifying the numbers for each sex :—

	Persons.	Males.	Females.
Population (exclusive of persons of the aboriginal native race, of mixed European and Native blood, and Chinese)	697,390	366,607	330,783
Half-castes and persons of mixed race living as and among Europeans	2,259	1,123	1,136
Chinese	3,711	3,685	26
Aboriginal natives (including 229 Maori wives of Europeans)	36,351	19,729	16,622
Half-castes and persons of mixed race living among and as members of Maori tribes ..	3,503	1,944	1,559
Total population on 12th April, 1896	*743,214	393,088	350,126

* Not including 171 persons, officers and crew of a British man-of-war.

The total half-caste or mixed European and Native population was 5,762 persons. The number of half-castes living among Europeans increased since 1891 by 75, or at the rate of 3·4 per cent. In that year the number of Maori wives of Europeans was 251; in 1896 it was 229. The Chinese decreased from 4,444 at the time of the census of 1891 to 3,711 in April, 1896; or at the rate of 16·5 per cent., caused mainly by the excess of departures over arrivals.

The Maori population fell from 41,993 in 1891 to 39,854 in 1896, according to the returns.

The increase on the total European population between April, 1891, and April, 1896, amounted to 76,702 persons, or a rate of 12·24 per cent. Between the census of 1886 and that of 1891 the numerical increase was 48,176 persons, or 8·33 per cent., so that an improved progress was made during the last five-year period to the extent of 3·91 per cent. The average annual increase in the period 1891–96 was at the rate of 2·33 per cent.

The population of the principal divisions of the colony in April, 1896, was—

	Persons.	Males.	Females.
North Island and adjacent islets (exclusive of Maoris)	340,631	181,089	159,542
Middle Island and adjacent islets (exclusive of Maoris)	362,236	190,038	172,198
Stewart Island	252	152	100
Chatham Islands (exclusive of Natives) ..	234	132	102
Kermadec Islands	7	4	3
Total for the colony (exclusive of Maoris)	703,360	371,415	331,945

During the interval between the censuses of April, 1891, and April, 1896, the increase of population in the North Island was far in excess of the increase in the Middle Island. The figures are: North Island, 1891, 281,455 persons, against 340,631 in 1896, a difference of 59,176, or at the rate of 21·03 per cent.; Middle Island, 1891, 344,711 persons, against 362,236 in 1896, a difference of only 17,525, or 5·08 per cent. The European population of Stewart Island increased from 202 to 252, and that of the Chatham Islands fell from 271 to 234 persons. The Kermadec Islands appeared for the first time in 1891 as part of New Zealand, with a population of 19 persons; the population is now only 7 persons. During the period 1886–91 the increase for the North Island was 30,973 persons, or a rate of 12·37 per cent; and of the Middle Island 17,119, or 5·23 per cent.; so that the North Island has advanced with more rapid strides in the quinquennium 1891–96 than in the previous one; while the rate of progress in the Middle Island has for both periods been but 5 per cent., or less than the natural increase by excess of births over deaths.

Population of Provincial Districts.

The following table gives the numbers of males and females in each provincial district in April, 1891, and April, 1896, and also for the Chatham Islands:—

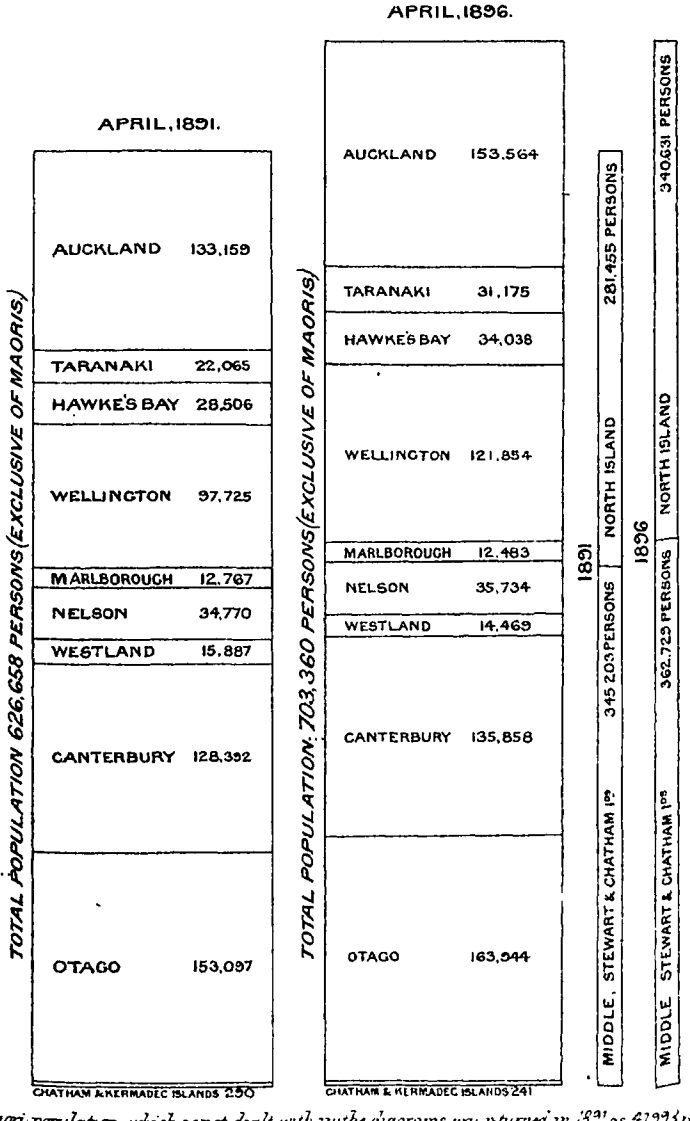
Provincial Districts.	April, 1891.			April, 1896.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Auckland ..	133,159	69,891	63,268	153,564	81,206	72,358
Taranaki ..	22,065	11,757	10,308	31,175	16,900	14,275
Hawke's Bay ..	28,506	15,744	12,762	34,038	18,397	15,641
Wellington ..	97,725	52,375	45,350	121,854	64,586	57,268
Marlborough ..	12,767	7,069	5,698	12,483	6,704	5,779
Nelson	34,770	19,448	15,322	35,734	19,574	16,160
Westland ..	15,887	9,255	6,632	14,469	8,106	6,363
Canterbury ..	128,392	66,105	62,287	135,858	69,708	66,150
Otago	153,097	81,073	72,024	163,944	86,098	77,846
Chatham Islands	271	149	122	234	132	102
Kermadec Islands	19	11	8	7	4	3
Totals ..	626,658	332,877	293,781	703,360	371,415	331,945

The numerical and centesimal increases for the provincial districts during the periods 1886–91 and 1891–96 were:—

Provincial Districts.	1886-91.		1891-96.	
	Numerical.	Per-centage.	Numerical.	Per-centage.
Auckland	Increase, 2,780	2·13	Increase, 20,405	15·32
Taranaki	„ 4,066	22·59	„ 9,110	41·29
Hawke's Bay ..	„ 3,938	16·03	„ 5,532	19·41
Wellington ..	„ 20,189	26·04	„ 24,129	24·69
Marlborough ..	„ 1,654	14·88	Decrease, – 284	–2·22
Nelson	„ 4,567	15·12	Increase, 964	2·77
Westland	Decrease, – 44	–0·28	Decr., – 1,418	–8·93
Canterbury	Increase, 6,992	5·76	Increase, 7,466	5·82
Otago	„ 3,943	2·64	„ 10,847	7·09

Of the total increase in the period 1891–96, amounting to 76,702 persons for the colony, or 12·24 per cent., more than one-half took place in the Wellington and Auckland Provincial Districts; the numbers by way of increase for those districts being 24,129, or 24·69 per cent, and 20,405, or 15·32 per cent., respectively. But the largest proportional advance was in Taranaki, being the really excellent increase of 41·29 per cent. Hawke's Bay shows an increase of 19·41 per cent. The population of Otago increased 7·09 per cent. only; Canterbury still less, 5·82 per cent.; while in Marlborough there was an actual decrease for the quinquennium of 2·22 per cent., and in Westland the decrease of population was at the rate of 8·93 per cent. The advantage is strikingly in favour of the provincial districts of the North Island, as pointed out previously. The rate of progress in 1891–96 was greater than that in 1886–91 in Auckland, Taranaki, Hawke's Bay, and Otago, being nearly the same in Wellington and Canterbury. At Nelson the progress was decidedly less in the later period, and in Westland there is further decline noticed. Marlborough, which showed an increase for 1886–91, now shows a loss.

Population (excluding Maoris) of the Provincial Districts and of the North and Middle Islands at the Censuses of April, 1891 and 1896.



(The Maori population, which is not dealt with on the diagrams, was returned in 1891 as 41,993 persons and in 1896 as 39,854 persons.)

Population of Counties.

New Zealand is, by "The Counties Act, 1876," divided into counties and boroughs, excepting certain outlying islands, which are not within county boundaries. It is provided by the above-mentioned Act that boroughs shall not be included in counties. In April, 1896, the number of the counties was 81. Of these, the North Island had 47, with a population amounting altogether to 191,374 persons. The Middle Island had 33 counties, the population being 200,117 persons. Stewart Island is a county in itself, and has a population of 244 persons. The names and populations of the various counties in the colony were as under at the date of the enumeration:—

Counties.	Census, 1896.	Census, 1891.	Increase or Decrease.
Mongonui ...	1,889	1,389	Inc. 500
Whangaroa ...	969	878	„ 91
Hokianga ...	1,909	1,494	„ 415
Bay of Islands	2,723	2,562	„ 161
Hobson	3,750	3,298	„ 452
Whangarei ...	6,847	6,120	„ 727
Otamatea ...	2,483	2,054	„ 429
Rodney ...	3,464	3,170	„ 294
Waitemata ...	6,762	6,184	„ 578
Eden	15,940	13,782	„ 2,158
Manukau ...	12,185	11,925	„ 260
Coromandel ...	4,987	2,846	„ 2,141
Thames ...	4,515	4,340	„ 175
Ohinemuri ...	4,761	1,516	„ 3,245
Piako	2,706	2,517	„ 189
Waikato ...	2,814	2,738	„ 76
Waipa	3,584	3,395	„ 189
Raglan	1,545	1,090	„ 455
Kawhia ...	598	308	„ 290
West Taupo ...	156	119	„ 37
East Taupo ...	232	152	„ 80
Rotorua ...	840	418	„ 422
Tauranga ...	1,622	1,393	„ 229
Whakatane ...	1,988	1,524	„ 464
Waiapu ...	447	379	„ 68
Cook	5,287	3,945	„ 1,342
Clifton	1,450	908	„ 542
Taranaki ...	9,970	7,905	„ 2,065
Stratford ...	5,141	2,521	„ 2,620
Hawera ...	6,934	4,347	„ 2,587
Patea	3,084	2,608	„ 476
Waitotara ...	2,737	2,255	„ 482
Wanganui ...	3,095	2,281	„ 814
Rangitikei ...	6,030	4,438	„ 1,592
Kiwitea ...	2,428		
Oroua	6,450	7,418	„ 2,811
Pohangina ...	1,351		
Manawatu ...	2,709	2,725	Dec. 16
Horowhenua ...	3,792	2,289	Inc. 1,503
Hawke's Bay ...	6,894	6,028	„ 866
Wairoa	1,490	1,246	„ 244
Waipawa ...	8,866	...*	...
Patangata ...	2,374	2,044	Inc. 330
Pahiatua ...	3,208	...*	...
Wairarapa North ...	7,209	5,143	„ 2,066
Wairarapa South ...	5,409	4,980	„ 429
Hutt	5,750	...*	...
Sounds	747	720	„ 27
Marlborough ...	6,330	6,520	Dec. 190
Kaikoura ...	1,575	1,460	Inc. 115
Collingwood ...	2,509	2,103	„ 406
Waimea ...	8,591	...*	...
Buller	4,833	4,659	„ 174
Inangahua ...	4,254	4,648	Dec. 394
Grey	4,592	4,330	Inc. 262
Westland ...	4,723	5,031	Dec. 308
Amuri	916	967	„ 51
Cheviot ...	1,042	164	Inc. 878
Ashley	11,913	12,396	Dec. 483
Selwyn	30,090	...*	...
Akaroa	3,886	3,771	Inc. 115
Ashburton ...	10,820	9,501	„ 1,319
Geraldine ...	7,499	14,588	„ 634
Levels	7,723		
Mackenzie ...	1,514	1,180	„ 334
Waimate ...	4,777	4,043	„ 734
Waitaki... ...	8,876	8,375	„ 501
Waihemo ...	2,148	2,040	„ 108
Waikouaiti ...	4,389	4,334	„ 55
Peninsula ...	2,645	2,701	Dec. 56
Taieri	6,950	7,079	„ 129
Bruce	4,828	4,696	Inc. 132
Tuapeka ...	6,477	6,327	„ 150
Clutha	6,564	5,574	„ 990
Maniototo ...	3,742	2,927	„ 815
Vincent ...	4,090	3,718	„ 372
Lake	2,663	2,919	Dec. 256
Southland ...	21,603	...*	...
Wallace ...	6,657	5,306	Inc. 1,351
Fiord	151	71	„ 80
Stewart Island	244	202	„ 42

As before stated, the total county population amounted to 391,735, or 55·69 per cent. of the total for the colony.† In counties are included all towns not constituted municipal boroughs; but, on the other hand, the people living in many of the boroughs can hardly be called townsfolk. The population in boroughs, which is given in detail further on, was 307,294 persons, or 43·69 per cent. of the

* Sundry boroughs were cut out from these counties between 1891 and 1896.
† For population of ridings, road districts, and localities, see Census volume, p. 32, Part I.

whole. For every 100 persons resident in counties in 1896 there were 78 residing in boroughs. In 1891 the counties had 352,097 persons, and the boroughs 270,343, or, in other words, for every 100 persons in counties, 76 were residents of the boroughs. Thus it will be seen that the proportion of the town to the county population was slightly greater in 1896 than in 1891.

Population of Boroughs.

There were 95 municipal boroughs in existence when the census of 1896 was taken. This was an increase of 8 on the number in 1891. Some of the new boroughs were town districts in 1891. In the following tables no populations are given for 1891 in respect of boroughs incorporated after that date, as a true comparison cannot well be made.

Boroughs.	Census, 1896.	Census, 1891.	Increase or Decrease.
Birkenhead ...	690	455	Inc. 235
Devonport ...	3,010	2,455	" 555
Auckland ...	31,424	28,613	" 2,811
Newton ...	2,379	2,087	" 292
Newmarket ...	1,929	1,586	" 343
Parnell ...	4,196	3,967	" 229
Onehunga ...	2,913	2,924	Dec. 11
Thames ...	4,261	4,618	" 357
Hamilton ...	1,248	1,212	Inc. 36
Cambridge ...	865	850	" 15
Tauranga ...	1,018	1,055	Dec. 37
Gisborne ...	2,334	2,158	Inc. 176
New Plymouth	3,825	3,350	" 475
Hawera ...	1,770	1,284	" 486
Patea ...	739	676	" 63
Wanganui ...	5,936	5,011	" 925
Marton ...	1,151	976	" 175
Feilding ...	2,045	1,583	" 462
Palmerston North ...	5,910	4,303	" 1,607
Foxton ...	1,102	1,223	Dec. 121
Hastings ...	3,190	2,303	Inc. 887
Napier ...	9,231	8,341	" 890
Dannevirke ...	1,415	...*	...
Woodville ...	1,060	971	" 89
Pahiatua ...	1,158	...*	...
Masterton ...	3,493	3,114	" 379
Carterton ...	1,291	1,112	" 179
Greytown ...	1,129	1,141	Dec. 12
Lower Hutt ...	1,520	1,329	Inc. 191
Petone ...	2,685	2,178	" 507
Onslow ...	1,249	979	" 270
Wellington ...	37,441	31,021	" 6,420
Karori ...	1,024	...*	...
Melrose ...	2,044	1,224	" 820
Picton ...	870	788	" 82
Blenheim ...	3,018	3,294	Dec. 276
Nelson ...	6,659	6,626	Inc. 33
Richmond ...	562	...*	...
Westport ...	2,424	2,622	Dec 198
Greymouth ...	3,099	3,787	" 688
Brunner ...	1,632	2,231	" 599
Kumara ...	1,149	1,176	" 27
Hokitika ...	2,059	2,178	" 119
Ross	727	822	" 95
Rangiora ...	1,869	1,783	Inc. 86
Kaiapoi ...	1,828	1,371	" 457
Christchurch...	16,964	16,223	" 741
Linwood ...	6,115	...*	...
St. Albans ...	5,781	5,247	" 534
Sydenham ...	10,312	9,680	" 632
Woolston ...	2,057	...*	...
Sumner ...	588	...*	...
Lyttelton ...	3,898	4,087	Dec. 189
Akaroa ...	613	571	Inc. 42
Ashburton ...	2,082	1,900	" 182
Timaru ...	3,613	3,668	Dec. 55
Waimate ...	1,286	1,379	" 93
Oamaru ...	5,225	5,621	" 396
Hampden ...	353	300	Inc. 53
Palmerston South ...	775	790	Dec. 15
Hawkesbury ...	760	743	Inc. 17
Port Chalmers	1,901	2,028	Dec. 127
North-east Valley ...	3,374	3,337	Inc. 37
Maori Hill ...	1,483	1,426	" 57
West Harbour	1,366	1,297	" 69
Dunedin ...	22,815	22,376	" 439
Roslyn ...	4,118	3,845	" 273
Mornington ...	3,584	3,523	" 61
Caversham ...	4,763	4,690	" 73
St. Kilda ...	1,185	1,153	" 32
South Dunedin	4,592	4,222	" 370
Green Island...	663	687	Dec. 24
Mosgiel ...	1,382	1,304	Inc. 78
Milton ...	1,139	1,158	Dec. 19
Kaitangata ...	1,362	1,145	Inc. 217
Lawrence ...	996	1,026	Dec. 30
Roxburgh ...	433	410	Inc. 23
Tapanui ...	408	428	Dec. 20
Balclutha ...	925	867	Inc. 58
Naseby ...	447	496	Dec. 49
Cromwell ...	539	474	Inc. 65
Alexandra ...	454	310	" 144
Arrowtown ...	409	426	Dec. 17
Queenstown ...	781	779	Inc. 2
Gore	2,032	1,618	" 414
Mataura ...	789	...*	...
Winton ...	397	288	" 109
Invercargill ...	5,632	4,950	" 682
North Invercargill ...	877	717	" 160
South Invercargill ...	1,886	1,559	" 327
East Invercargill	935	736	" 199
Avenal ...	327	302	" 25
Gladstone ...	339	287	" 52
Campbelltown	1,075	650	" 425
Riverton ...	893	843	" 50

* Boroughs constituted since 1891.

The Cities of Auckland, Christchurch, and Dunedin have considerable suburbs. The suburban population of Wellington is comparatively small. The following gives the names and populations of the several localities which may fairly be termed suburbs of the four principal boroughs:—

SUBURBS OF AUCKLAND.

Boroughs—	Population, 1896.
Birkenhead	690
Devonport	3,010
Newmarket	1,929
Newton	2,379
Parnell	4,196
Road Districts—	
Arch-hill	1,557
Eden Terrace	1,604
Epsom	660
Mount Albert	1,668
Mount Eden	3,677
Mount Roskill	495
One-tree Hill	975
Point Chevalier	591
Remuera	2,034
Northcote Riding	530
Outlying portion of Parnell Riding, being land in the Domain with hospital on it	197
Total suburbs	26,192
Auckland City	31,424
Total Auckland and suburbs	57,616

SUBURBS OF WELLINGTON.

Boroughs—	
Onslow	1,249
Melrose	2,044
Karori	1,024
Total suburbs	4,317
Wellington City	37,441
Total Wellington and suburbs	41,758

SUBURBS OF CHRISTCHURCH.

Boroughs—	Population, 1896.
St. Albans	5,781
Sydenham	10,312
Linwood	6,115
Woolston	2,057
Road Districts—	
Avon (part)	2,962
Heathcote (part)	1,980
Riccarton (part)	3,657
Spreydon	1,278
Halswell (part)	224
Total suburbs	34,366
Christchurch City	16,964
Total Christchurch and suburbs	51,330

In laying off the suburbs of Christchurch the boundaries of the Christchurch Health District have been mainly followed.

SUBURBS OF DUNEDIN.

Boroughs—	
Caversham	4,763
Maori Hill	1,483
Mornington	3,584
North-East Valley	3,374
Roslyn	4,118
St. Kilda	1,185
South Dunedin	4,592
West Harbour	1,366
Total suburbs	24,465
Dunedin City	22,815
Total Dunedin and suburbs	47,280

The increase of population for five years at the four chief centres, with their suburbs, was:—

	Census, 1891.	Census, 1896.	Numerical Increase	Increase per Cent.
Auckland and suburbs	51,287	57,616	6,329	12·3
Wellington and suburbs	34,190	41,758	7,568	22·1
Christchurch and suburbs	47,846	51,330	3,484	7·3
Dunedin and suburbs	45,869	47,280	1,411	3·1

Thus the two principal cities of the North Island are found to have progressed at a greater rate than those of the Middle Island, and Wellington in particular to have developed at seven times the

rate of Dunedin and three times as fast as Christchurch during the quinquennium.

Population of Town Districts.

Besides the boroughs, there are 39 town districts (not including the special town district of Rotorua, constituted under "The Thermal Springs Districts Act, 1881,") which are portions of the counties in which they are situated. Two only of these, Stratford and Hampstead, have more than 1,000 inhabitants. A list of these town districts is subjoined:—

Town Districts.	Population.	Town Districts.	Population.
Kamo	222	Clyde (Wairoa)	579
Whangarei	744	Taradale	807
Helensville	564	Ormondville	453
Papakura	274	Waipawa	764
Te Aroha	672	Kaikoura North	301
Te Awamutu	347	Featherston	711
Kihikihi	202	Johnsonville	493
Ngaruawahia	235	Havelock	365
Rotorua*	499	Amberley	437
Opotiki	641	Southbridge	494
Waitara (Raleigh)	517	Hampstead	1,214
Opunake	400	Tinwald	538
Inglewood	658	Geraldine	841
Stratford	1,256	Temuka	660
Normanby	396	Arowhenua	789
Manaia	471	Allanton (formerly Grey) ..	274
Waverley	442	Outram	452
Lethbridge	251	Clinton	474
Bulls	521	Wyndham	483
Halcombe	376	Otautau	367

Population of Adjacent Islands.

The names and populations of the islands are:—

Islands.	Total.	M.	F.	Islands.	Total.	M.	F.
Rangitoto	3	3	..	Motutapu	11	8	3
Great Barrier ..	307	193	114	Brown's	1	1	..
Week's Island ..	2	1	1	Rotoroa (Ruth's) ..	15	6	9
Waiheke	166	76	90	Slipper	3	3	..
Kawau	10	7	3	Portland	25	10	15
Motiti	9	8	1	Kapiti	1	1	..
Tiritiri	6	2	4	Somes's	9	3	6
Ponui Light ..	1	1	..	Stephens	16	7	9
Ponui Island ..	28	13	15	The Brothers ..	3	3	..
Cuvier	6	4	2	Quarantine	2	1	1
Moturoa	2	1	1	Dog	13	5	8
Mercury	7	2	5	Ruapuki	9	9	..
Mokohinau	5	3	2	Centre	15	10	5
Motuhora	8	4	4	Chatham	234	132	102
Bean Rock Light ..	1	1	..	Kermadec	7	4	3
Motuhihi ..	11	6	5		—	—	—
Pahiki	10	7	3		950	538	412
Rakino	4	3	1		—	—	—

The islands which are not included within the boundaries of the counties had a population of 950 persons (exclusive of Maoris),

* Constituted under "The Thermal Springs Districts Act, 1881."

against 913 in 1891. Only three of the islands had a population over 100 persons at last census. The population of the Great Barrier increased since 1891 from 262 to 307 persons; Waiheke shows a decrease from 215 to 166 persons. Europeans at the Chatham Islands decreased from 258 to 234.

INCREASE OF POPULATION.

The increase of population for twelve years is shown below. Although the large increase in 1893 was not maintained during 1894, 1895, and 1896, the arrivals in the colony during these last three years at all events exceeded the departures by nearly five thousand people. Notwithstanding various influences, the colony not only retained the population drawn to it in the years 1892 and 1893, but also absorbed 4,620 persons from other countries.

Year.	Estimated Population on the 31st December.	Increase during the Year			Centesimal Increase on Population of Previous Year.
		By Excess of Births over Deaths.	By Excess of Arrivals over Departures.*	Net Increase.	
1885	575,172	13,612	−2,744†	10,868	1·93
1886	589,386	13,164			
1887	603,361	12,998			
1888	607,380	13,194	−17,194†	58,886	10·24
1889	616,052	12,685			
1890	625,508	12,284			
1891	634,058	11,755			
1892	650,433	11,417	4,958	16,375	2·58
1893	672,265	11,420	10,412	21,832	3·36
1894	686,128	11,610	2,253	13,863	2·06
1895	698,706‡	11,683	895	12,578	1·83
1896	714,162	12,180	1,472	13,652‡	1·91

It will be observed that in the period 1885 to 1891 the total increase of the population was less than the natural increase by excess of births over deaths, owing to the fact that the loss by departures was greater than the gain by arrivals. But subsequently, 1892–1896, the colony gained considerably by excess of immigration, besides the natural increase for those years.

POPULATION OF AUSTRALASIA.

The Australasian Colonies as a whole contained a population on the 31st December, 1896, estimated at 4,323,148 persons, including those living in the Northern Territory of South Australia, but exclu-

* Corrected in accordance with census results of 1886, 1891, and 1896. The amount of loss by departures in the period 1886-91, though correct in the aggregate, cannot be allocated with exactness to the respective years. † Loss.

‡ The results of the census taken in April, 1896, disclosed the fact that the estimate of population for December, 1895, was too low by 1,804 persons. Adding this number to the increase for 1896 (13,652 persons) makes 15,456, which is the difference between the populations given for the years 1895 and 1896.

sive of the aboriginal natives of Queensland, South and Western Australia, and 39,854 New Zealand Maoris.

The population of Fiji was 120,473 persons—66,554 males and 53,919 females. These numbers include natives and imported labourers, besides people of European descent.

AUSTRALASIAN COLONIES: ESTIMATED POPULATION ON 31ST DECEMBER, 1896.

	Males.	Females.	Totals.
Queensland	264,613	207,566	472,179
New South Wales ..	695,150	602,490	1,297,640
Victoria	595,968	578,920	1,174,888
South Australia	182,185	173,101	355,286
Ditto, Northern Territory	4,514	420	4,934
Western Australia ..	96,952	40,994	137,946
Tasmania	*	*	166,113
New Zealand	376,987	337,175	714,162

ARRIVALS AND DEPARTURES.

The number of persons who arrived in the colony in the year 1896 was 17,236, a decrease of 4,626 on the number for the previous year. Of the arrivals in 1896, 15,320 persons were classified as adults, being above the age of twelve years, and 1,916 as children. The total number of males was 11,145, and of females 6,091. The arrivals from the United Kingdom numbered 1,956, and from Australia 14,125. Besides these, 326 persons came from Fiji, and 829 from the South Seas and other ports, including arrivals by mail-steamers from San Francisco.

The practice of nominating immigrants to be brought out partly at the Government expense has been discontinued since the 16th December, 1890, and there was no free immigration in the year 1896.

One hundred and seventy-three Chinese arrived in and 122 left the colony during 1896, the arrivals being 51 in excess of the departures.

The total departures in 1896 were 15,764 persons, being 5,203 fewer than in 1895. Thus, the movement of population to and from the colony is found to have been less than in the previous year.

In each of the years 1892 to 1896, inclusive, the colony has drawn more population than it has parted with, notwithstanding the attractions of Australian goldfields.

The departures from the colony by the Union Steamship Company's boats, as given through the Customs Department, are checked by special returns kindly furnished by the pursers of the steamers, and where persons who did not book their passages have been omitted the necessary additions are made. The pursers' returns also serve to prevent the occasional omission of the full number of persons leaving by any one vessel, which sometimes had happened previous to the introduction of this check. Unless more passengers are at any time of great pressure taken away from New Zealand

* No information as to sexes.

than can lawfully be carried, the returns of outgo of population should prove very fairly correct, and indeed the census of 1896 showed that the estimates of population even after five years' interval was a very close approximation to the truth.

Of the departures in 1896, 14,144 persons were over twelve years of age, and 1,620 children. Nearly twice as many males left the colony as females, the numbers being 10,032 and 5,732 respectively. The departures to the United Kingdom amounted to 1,578 persons, and those to Australia numbered 13,208. Besides these, 150 persons left for Fiji, and 828 for other ports (including passengers for San Francisco).

The results for the year are exhibited, giving full detail in tabular form:—

ARRIVALS AND DEPARTURES, 1896.

	Arrivals.	Departures.	Excess of Arrivals.	Excess of Departures.
Total persons ..	17,236	15,764	1,472	..
Males	11,145	10,032	1,113	..
Females	6,091	5,732	359	..
Adults	15,320	14,144	1,176	..
Children	1,916	1,620	296	..
Numbers from and to—				
United Kingdom ..	1,956	1,578	378	..
New South Wales..	9,723	9,598	125	..
Victoria	3,575	2,960	615	..
Tasmania ..	827	650	177	..
Fiji	326	150	176	..
Other British Possessions ..	176	185	..	9
Pacific Islands ..	285	195	90	..
Other foreign ports	368	448	..	80

Chinese, included above: Arrivals 173 (171 men and 2 women); departures, 122 men.

The arrivals and departures for ten years are given in the following tables, in which 1893 shows the highest number of persons inwards, 26,135, and 1894 of persons outwards, 22,984. In regard to Australia the movement was also greatest during the same years, the arrivals in 1893 being 22,361, and departures in 1894 20,488 persons:—

ARRIVALS, TEN YEARS.

Year.	From United Kingdom.	From Australian Colonies.	From Other Places.	Total Arrivals.
1887	4,906	8,035	748	13,689
1888	4,138	8,784	684	13,606
1889	3,275	11,212	905	15,392
1890	2,812	11,539	677	15,028
1891	2,435	11,144	852	14,431
1892	2,555	14,674	893	18,122
1893	2,929	22,351	855	26,135
1894	2,846	21,291	1,100	25,237
1895	2,365	18,573	924	21,862
1896	1,956	14,125	1,155	17,236
Totals, ten years	30,217	141,728	8,793	180,738

DEPARTURES, TEN YEARS.

Year.	To United Kingdom.	To Australian Colonies.	To Other Places.	Total Departures.
1887	2,086	9,600*	1,026*	12,712*
1888	1,964	19,649*	1,168*	22,781*
1889	2,039	12,144*	995*	15,178*
1890	1,863	13,862*	1,085*	16,810*
1891	1,705	15,016*	908*	17,629*
1892	1,612	10,669	883	13,164
1893	1,583	13,277	863	15,723
1894	1,669	20,488	827	22,984
1895	1,703	18,377	887	20,967
1896	1,578	13,208	978	15,764
	17,802	146,290*	9,620*	173,712*

It will be found that the above figures give the total arrivals from the United Kingdom in ten years as 30,217 persons, and the departures as 17,802; and there is no reason to doubt the correctness of these results. The colony drew directly from the Mother-country 12,415 persons over and above those that went back directly during the decennium. For each year in the period the arrivals from the United Kingdom exceed the departures, but the excess, which was 2,820 in the year 1887, fell to 378 in 1896. In regard to Australia, for each of the years 1887 to 1891, inclusive, the withdrawal of population exceeded the arrivals, and the net result is shown to have been, according to the returns, a loss to New Zealand of 19,557 persons. But, as explained in a foot-note to the table, the departures were not all noted, and the error cannot be corrected in any table showing departures for each distinct year. The greatest loss occurred in 1888, when a reduction of public expenditure out of loan-moneys was effected. But each year from 1892 to 1896 the balance of interchange with Australia is in favour of New Zealand, though only slightly so in 1895 and 1896. For this five-year period there was a net gain from Australia amounting to 14,995 persons.

The interchange of people with places other than the United Kingdom and Australia has been since 1890 in favour of New Zealand, the net gain amounting to 433 for the six-year period 1891–96. From 1887 to 1890 each year showed a balance of outgo, amounting to 1,260 persons altogether.

The Board of Trade, London, publishes the total emigration from the United Kingdom to Australasia as a whole. By the figures given it will be seen that there is a steady annual decrease in the number of persons coming to these colonies from the Home country. Alongside of the Imperial returns of departures to Australasia are shown in the following statement the arrivals in New Zealand direct from the United Kingdom, taken from our own returns, which numbers are short of the full total of persons coming here from England by the arrivals *viâ* Australia or the United States of America. But, using the information available, it seems evident that New Zealand

* Figures given according to the returns, but short of actual fact, as proved by census, 1891.

has been latterly preferred to Australia, from the high proportion which the arrivals here (direct) bear to every hundred of departures from England for the Australasian Colonies.

So long as New Zealand can secure 18 per cent. or more of the total persons leaving England for Australasia, she takes more than the proportion her population bears to that of the seven colonies collectively :—

Year.	Emigration from United Kingdom to Australasia.	Arrivals in New Zealand from United Kingdom.	Arrivals in New Zealand per 100 Departures for Australasia from United Kingdom.
1886	44,055	6,893	15·65
1887	35,198	4,906	13·94
1888	31,725	4,138	13·04
1889	28,834	3,275	11·36
1890	21,570	2,812	13·03
1891	19,957	2,435	12·20
1892	16,183	2,555	15·79
1893	11,412	2,929	25·67
1894	11,151	2,846	25·52
1895	10,809	2,365	21·88
1896	10,710	1,956	18·26

A statement is added giving the immigration and emigration for each of the Australasian Colonies during the year 1896. The emigration figures are not indeed perfect, as no record is obtained of a number of departures by sea. In regard to New Zealand the error is probably by no means great :—

Colony.	Arrivals, 1896.	Departures, 1896.	Excess of Arrivals over Departures, 1896.
Queensland	27,723	24,466	3,257
New South Wales	121,644	122,486	−842*
Victoria (by sea only)	84,872	108,143	−23,271*
South Australia	92,591	94,620	−2,029*
Ditto, Northern Territory ..	553	362	191
Western Australia	55,215	19,266	35,949
Tasmania	19,076	16,498	2,578
New Zealand	17,236	15,764	1,472

At the census of 1881, the year in which taxation was first imposed on Chinese landing in the colony, the Chinese population amounted to 5,004 persons, which fell to 4,542 in 1886, and further to 4,444 in 1891. In April, 1896, the census revealed a further fall to 3,711 persons. During the period 1881–96 the poll-tax was £10 per head, and this seemed sufficient for the purpose of preventing a large influx of the Chinese, except for the circumstance that, during

* Excess of departures.

the years 1894 and 1895, the arrivals shown by the Customs returns are found to have been somewhat greater than the departures. In 1896, the Chinese Immigrants Act Amendment Act of that year raised the poll-tax on Chinese immigrants to £100 per head, and limited the number of Chinese passengers that may be carried by vessels to this colony to one for every 200 tons burthen. This Act is to remain in force only until "The Asiatic Restriction Act, 1896," which has been reserved for Her Majesty's assent, and has a wider scope, comes into operation.

Chinese immigration is under restraint in Australia as well as in New Zealand. It is stated that in New South Wales the arrivals have been altogether stopped by means of a similar poll-tax to that of New Zealand, and requirement that every vessel should not bring more than one Chinaman to every 300 tons. These conditions are helped by the law which forbids the naturalisation of a Chinese, and some prohibition as to mining without special authority.

Of the Chinese living in New Zealand in 1896, 3,685 were males and 26 females. Of the males, 88 were returned as married. The number of the Chinese under 14 years of age was only 14 males and 11 females. These numbers do not include the issue of unions between Chinese men and European women.

The occupations show 2,162 gold-miners, 527 market and other gardeners with 129 assistants, 94 greengrocers and 38 assistants, 94 shop- or store-keepers and 30 assistants, 59 labourers, 43 hotel servants; 31 vegetable, 27 general, and 25 fish hawkers; 31 laundrymen and women, 31 domestic servants, 29 lodginghouse keepers, 27 cooks (not domestic), 24 farm-labourers, 19 eating-house keepers, 19 grocers with 21 assistants, 16 fishermen, 11 merchants with 6 assistants, 7 drapers and 1 assistant. Amongst various others, in small numbers each, are returned 1 law-clerk, 2 missionaries, 5 medical men, 1 dentist, 1 chemist, 1 interpreter, 2 bankers, 1 opium-seller.

Three of the Chinese were inmates of hospitals, and 3 others of benevolent asylums. While 22 were lunatics, only 2 were prisoners in gaol.

Density of Population.

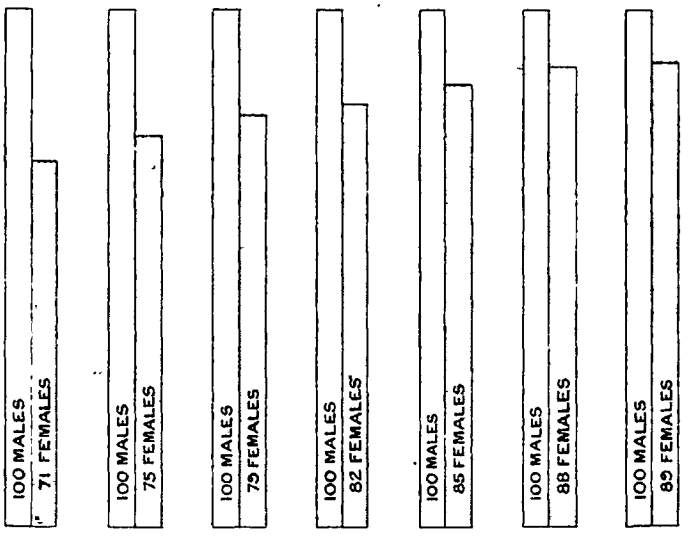
The proportion of persons to a square mile in New Zealand increased from 6·024 to 6·760 between 1891 and 1896. In 1886 there were 5·561 persons to a square mile, giving an increase of 1·2 during the last ten years.

Since 1858 the proportions at the different census years were:—

Number of Persons to a Square Mile.

Year.	Persons.	Year.	Persons.
1858	0·566	1878	3·969
1861	0·944	1881	4·693
1864	1·641	1886	5 561
1867	2·094	1891	6·024
1871	2·456	1896	6·760
1874	2·869		

Increase in the proportion of Females to Males at successive Census periods (excluding Maoris).



Figures to which the above proportions relate :—

YEAR	MALES	FEMALES
1871	150,356	106,037
1874	170,981	128,533
1878	230,998	183,414
1881	269,605	220,328
1886	312,221	266,261
1891	332,877	293,781
1896	371,415	331,945

While the proportion in 1896 of the Female to the Male population was 89 per cent the proportion of female electors who voted at the General Election of that year was 73 to every 100 male electors.

Of the different provincial districts, the most thickly populated is Wellington, and the one with the fewest people in proportion to size is Marlborough. The table below shows the area of the provincial districts, and the average number of persons to a square mile :—

Provincial Districts.	Area in Acres.	Area in Square Miles.	Persons to a Square Mile.
Wellington	7,042,000	11,003	11·075
Canterbury	8,985,400	14,040	9·677
Taranaki	2,117,380	3,308	9·424
Hawke's Bay	2,822,300	4,410	7·718
Otago	16,311,700	25,487	6·432
Auckland	16,477,700	25,746	5·965
Nelson	6,572,100	10,269	3·480
Westland	2,970,600	4,641	3·118
Marlborough	3,041,670	4,753	2·626

The population in the boroughs, amounting to 307,294, gives an average of 1,354 persons to every square mile in these towns. The proportion has not changed since 1891. The people lay closest in the Borough of Wellington, where there are 34 persons to the acre, or at the rate of 21,760 to the square mile.

Outside the boroughs (and excluding persons on shipboard) the population shows an average of 3·78 to the square mile of country, against 3·40 to the square mile in 1891 and 3·16 in 1886.

Proportions of the Sexes.

At the census of 1858 the number of females to 100 males was found to be 76·41, and the proportion was actually less in 1861, when the number was 62·16, and smaller still in 1864 (61·53). From this last year the proportion of females steadily increased to 89·31 at the last census.

Year.	Number of Females to 100 Males.	Year.	Number of Females to 100 Males.
1858	76·41	1878	79·40
1861	62·16	1881	81·72
1864	61·53	1886	85·28
1867	65·75	1891	88·26
1871	70·52	1896	89·31
1874	75·17		

The numbers of the sexes are shown to be gradually becoming equal as time advances. Indeed, there was only one provincial district (Westland) which showed at last census an actual diminution of females (269), and with this is observed a far greater reduction in the number of males (1,149). In Marlborough the males were found to be 365 fewer in 1896 than in 1891, while the females increased by 81 in number.

Religion.

Of the various religious denominations, the Church of England has most adherents in the colony. They numbered 281,166 at the date of the census; or, including 1,643 Protestants not more specifically described, 282,809 persons, being 40·27 out of every 100 of

population. The Presbyterians numbered 159,952 persons, or 22·78 per cent., and the Roman Catholics came next with 97,525, or, including Catholics not further defined, 98,804, which gives a proportion of 14·07 per cent. The Methodists were 73,367, or 10·44 in every 100 persons. Of other denominations, the Baptists, of whom there were 16,037, and the Salvation Army, 10,532 persons, were those returning more than 1 per cent. of the total population, the proportions being 2·28 and 1·50 respectively. 15,967 persons objected to state their religious belief, or 2·27 in every 100.

The numbers and percentages for five censuses are given in tabular form, so as to allow of the degree of increase relatively to the population being observed :—

Denominations.	Number of Adherents in 1896.	Proportion per Cent. of Population.				
		1878.	1881.	1886.	1891.	1896.
Church of England and Protestants (undefined) ..	282,809	42·55	41·50	40·17	40·51	40·27
Presbyterians	159,952	22·95	23·08	22·59	22·62	22·78
Methodists	73,367	9·14	9·53	9·55	10·14	10·44
Baptists	16,037	2·21	2·34	2·48	2·37	2·28
Congregational Independents	6,777	1·34	1·37	1·35	1·07	0·97
Lutherans..	5,538	1·36	1·18	1·02	0·90	0·79
Salvation Army	10,532	..	..	0·91	1·50	1·50
Society of Friends	321	0·04	0·05	0·05	0·05	0·05
Unitarians	375	0·11	0·10	0·08	0·05	0·05
Other Protestants	15,194	1·08	1·26	1·55	1·82	2·16
Roman Catholics and Catholics (undefined)	98,804	14·21	14·08	13·94	13·96	14·07
Greek Church	116	0·02	0·01	0·01	0·01	0·02
Hebrews	1,549	0·34	0·31	0·27	0·23	0·22
Buddhists, Confucians ..	3,391	1·05	1·01	0·77	0·63	0·48
Other Denominations ..	1,099	0·05	0·11	0·10	0·12	0·16
No Denomination	8,535	0·53	0·89	1·05	1·32	1·22
No Religion	1,875	0·05	0·06	0·17	0·25	0·27
Unspecified	1,122	0·42	0·27	0·50	*	*
Object to state	15,967	2·55	2·85	3·44	2·45	2·27
	703,360	100·00	100·00	100·00	100·00	100·00

Here the proportion belonging to the Church of England is shown to have been 40 per cent. since 1886, but a little higher previously. Presbyterians have been 22 or 23 per cent. of the whole since 1878, but the proportion of Methodists rose steadily from 9·14 to 10·44. Congregationalists declined from 1·37 per cent. in 1881 to 0·97 per cent. in 1896. Lutherans are fewer in proportion to the total at each succeeding census, while the Salvation Army increased from 0·91 in 1886 to 1·50 in 1891 and 1896.

Roman Catholics and Catholics undefined formed practically 14 per cent. of the people at each of the census years. The proportion of Buddhists and Confucians diminishes with the number of Chinese in the colony. In 1886 the percentage of persons objecting to state their religion was 3·44, which fell to 2·45 in 1891, and, further, to 2·27 in 1896.

* " Unspecified " not taken into account.

A full statement of the particulars for all denominations, as at the census of 1891 and 1896, is given, with the numerical and centesimal increase or decrease in each case. Amongst 1,710 given as "Other Protestants," 663 described themselves as "Church of God," 142 as "Gospel Temperance Mission," 80 as "Our Father's Church," 205 as "Christians of no Denomination," 88 as "Conditional Immortalists," 24 "New and Latter House of Israel," 26 the "Free Church," 18 "Forward Movement," 22 the "Body of Christ," and the remainder variously in very small numbers.

NUMBERS FOR EACH DENOMINATION, AND INCREASE.

Religious Denominations.	Census, 1896.			Census, 1891.	Increase or Decrease.	
	Males.	Females.	Persons.	Persons.	Numerical.	Centesimal.
Total population ..	371,415	331,945	703,360	626,658	76·702	12·24
Total for specified religions	370,637	331,601	702,238	625,370	76,868	12·29
Episcopalians—						
Church of England ..	148,171	132,995	281,166	250,945	30,221	12·04
Protestants, undescribed	996	647	1,643	2,386	−743	−31·14
Presbyterians	84,259	75,693	159,952	141,477	18,475	13·06
Methodists—						
Wesleyan Methodists* ..	31,481	31,892	63,373	56,035	7,338	13·10
Primitive Methodists ..	3,449	3,592	7,041	5,220	1,821	34·89
Methodists (undefined)	1,476	1,417	2,893	2,071	822	39·69
Others *	34	26	60	89	−29	..
Baptists	7,690	8,347	16,037	14,825	1,212	8·18
Congregational .. Independents	3,284	3,493	6,777	6,685	92	1·38
Lutherans, German Protestants	3,537	2,001	5,538	5,616	−78	−1·39
Unitarians	232	143	375	308	67	21·75
Society of Friends ..	200	121	321	315	6	1·90
Church of Christ (Disciples of Christ)	2,700	3,159	5,859	5,241	618	11·79
Brethren (Christian and Plymouth)	2,359	2,676	5,035	3,537	1,498	42·35
Believers in Christ ..	36	41	77	193	−116	−60·10
Evangelists	23	10	33	93	−60	−64·52
Nonconformists	59	36	95	77	18	23·38
Salvation Army	5,244	5,288	10,532	9,383	1,149	12·25
Christadelphians ..	485	467	952	700	252	36·00
Swedenborgians, or New Church	101	90	191	178	13	7·30
Seventh-day Adventists ..	316	460	776	415	361	86·99
Students of Truth ..	148	192	340	325	15	4·62
Dissenters	32	33	65	42	23	54·76
Christian Israelites, Israelites	27	34	61	55	6	10·91
Other Protestants ..	860	850	1,710	439	1,271	..

* Includes United Methodist Free Churches and Bible Christians, which bodies were incorporated in the Wesleyan Methodist Church on 13th April, 1896.

NOTE.—The minus sign (−) indicates decrease.

135020

Religious Denominations.	Census, 1896.			Census, 1891.	Increase or Decrease.	
	Males.	Females.	Persons.	Persons.	Numerical.	Centesimal.
Roman Catholics ..	50,348	47,177	97,525	85,856	11,669	13·59
Catholics (undefined) ..	704	575	1,279	1,416	−137	−9·68
Greek Church	99	17	116	56	60	107·14
Catholic Apostolic ..	118	129	247	150	97	64·67
Other Denominations—						
Hebrews	808	741	1,549	1,463	86	5·88
Mormons, Latter day Saints	162	127	289	206	83	40·29
Spiritualists	196	180	376	339	37	10·91
Buddhists, Confucians, &c.	3,374	17	3,391	3,928	−537	−13·67
Others	125	62	187	154	33	..
No Denomination—						
Freethinkers	3,076	907	3,983	4,475	−492	−10·99
Agnostics	426	136	562	322	240	74·53
Deists, Theists ..	38	8	46	51	−5	9·80
No Denomination ..	2,410	1,488	3,898	2,999	899	29·98
Doubtful	31	15	46	405	−359	..
No Religion—						
No Religion	1,089	401	1,490	1,269	221	17·42
Atheists	88	29	117	123	−6	−4·88
Secularists	112	41	153	65	88	135·38
Others (variously returned)	93	22	115	101	14	..
Object to state	10,141	5,826	15,967	15,342	625	4·07
Unspecified	778	344	1,122	1,288	−166	−12·89

It will be seen by the table that, of the larger Protestant denominations, the Wesleyan Methodists increased since 1891 from 56,035 to 63,373 persons, being at the rate of 13·10 per cent.; Presbyterians from 141,477 to 159,952, or 13·06 per cent.; and the Church of England from 250,945 to 281,166, or 12·04 per cent. Baptists gained 8·18 per cent. The Salvation Army, which increased its number in the period 1886–91 from 5,276 to 9,383, or 77·84 per cent., only gained 1,149 persons between 1891 and 1896, being at the moderate rate of 12·25 per cent. The numbers of the Brethren show 42·35 per cent., and of Seventh-day Adventists 86·99 per cent. increase; but the Congregational Independents only 1·38, and Lutherans an actual decrease of 78 adherents, or 1·39 per cent. Of the Protestant bodies having but few members in the colony, the Unitarians increased from 308 to 375, and the Society of Friends from 315 to 321.

Roman Catholics added 11,669 to their number, being 13·59 per cent., a rate slightly higher than that obtained by the Wesleyan Methodists.

Hebrews were 1,549 in 1896, and 1,463 in 1891, a difference of 86. Spiritualists progressed but little, the numbers being 339 and 376. Freethinkers decreased from 4,475 to 3,983, or nearly 11 per cent., which is worthy of remark when contrasted with the increase of 14·01 per cent. gained between 1886 and 1891; but Agnostics, who numbered 322 in 1891, added 240, making 562 in 1896.

Proportions of the Sexes in the Various Denominations.

While the number of males is found to be greater than that of the females in the Church of England, Presbyterian, and sundry other religious denominations, the contrary result is found in the following cases, the proportions per cent. being—

	Males.	Females.
Wesleyan Methodists	49·68	50·32
Primitive Methodists	48·98	51·02
Baptists	47·95	52·05
Congregational Independents	48·46	51·54
Church of Christ	46·08	53·92
Brethren	46·85	53·15
Salvation Army	49·79	50·21
Seventh-day Adventists	40·72	59·28

Amongst those persons grouped as of "No denomination," "No religion," and "Object to state," the proportion of females is very small, as will be seen by the next figures :—

	Males.	Females.
No Denomination		
Freethinkers	77·23	22·77
Agnostics	75·80	24·20
Deists, Theists	82·60	17·40
No Denomination	61·83	38·17
Doubtful	67·39	32·61
No Religion—		
No Religion	73·09	26·91
Atheists	75·21	24·79
Secularists	73·20	26·80
Others (variously returned)	80·87	19·13
Object to state	63·51	36·49

Sunday-schools.

As to attendance at Sunday-schools, a comparison can only be made if the teachers be included with the scholars. Proceeding on these lines, a large development is found since 1878 :—

ATTENDING SUNDAY-SCHOOLS (INCLUDING TEACHERS.)

Census Year.	Totals.	Males.	Females.
1878	62,273	30,707	31,566
1886	99,884	48,509	51,375
1896	116,045	54,063	61,982

The excess of females over males would seem as time goes on to grow greater, both numerically and in proportion to the numbers attending Sunday-school.

The number of scholars at the Sunday-schools in 1896 was 104,934, of whom 50,096 were boys and 54,838 girls. The teachers were 11,111 of both sexes, 3,967 being males and 7,144 females.

BIRTHPLACE.

Of the population, exclusive of Maoris (703,360 persons), all but 604 were described as to birthplace on the census schedules. The number of the New Zealand-born was 441,661, and of those born in Australia, Tasmania, and Fiji, 21,782, making 463,443 born in Australasia. The New Zealand-born increase in proportion to the

whole with every successive census. In 1886, 51·89 per cent. of the population were born in this colony; in 1891, the percentage was 58·61; and in 1896 it had reached 62·85, adding to which 3·10 per cent. born in Australia, &c., makes 65·95 out of every 100 persons living in New Zealand who were born in Australasia.

215,161 persons, or 30·62 per cent. of the population, were born in the United Kingdom, which number was divided as under:—

Born in United Kingdom—	Number of Persons.	Per Cent. of Population.
England	116,541	16·58
Wales	2,148	0·31
Scotland	50,435	7·18
Ireland	46,037	6·55
	215,161	30·62

Besides these, there were 3,750 persons born in other British possessions.

Summarising these results, it is found that 682,354 of the population, or 97·10 per cent., were born in the British possessions, made up as follows:—

Born in	Number of Persons.	Per Cent. of Population.
Australasia	463,443	65·95
United Kingdom	215,161	30·62
Other British Possessions	3,750	0·53
	682,354	97·10

There remained 19,080 persons born in foreign countries, or 2·71 per cent. of population; 1,322 born at sea; and 604 whose birthplaces were not specified.

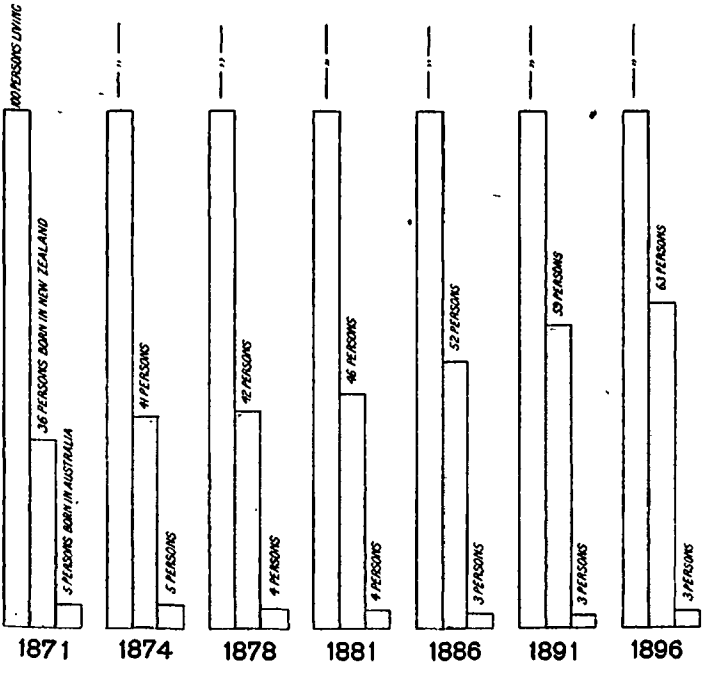
The New Zealand-born population increased from 366,716 in 1891 to 441,661, or at the rate of 20·44 per cent., between 1891 and 1896, the numerical increase being 74,945 persons. The numbers born in the United Kingdom decreased altogether by 3,673 in the quinquennium.

Born in	Persons. 1896.	Decrease since 1891. Numerical.	Decrease since 1891. Centesimal.
England	116,541	529	0·45
Wales	2,148	66	2·98
Scotland	50,435	1,481	2·85
Ireland	46,037	1,597	3·35

The numbers of Australian-born are found to have increased for each colony. The number born in Queensland, living in New Zealand, was only 481 in the year 1891, but 930 in 1896, an increase of 93·35 per cent. There were 2,833 persons in this colony in 1891 born in New South Wales, and 4,536 at last census, or an increase of 60·11 per cent. in five years. New Zealand also gained on the number born in Victoria, there being 10,471 in 1896 against 8,941 in 1891, or 17·11 per cent. increase. And similarly on the South Australian and Tasmanian-born.

Proportions of New Zealand and Australian born in every 100 persons living in New Zealand at successive censuses.

(Explanation of diagram: Out of every 100 persons living in N. Z. at the Census of 1871, 36 were found to have been born in this Colony and 5 persons to have been born in Australia.)



Census Year.	Total Population of New Zealand.	New Zealand born (included in previous column).	Australian born (included in first column).
1871	256,393	93,474	12,426
1874	299,514	122,635	13,601
1878	414,412	174,126	16,091
1881	489,933	223,404	17,277
1886	578,482	300,190	17,245
1891	626,658	366,716	15,943
1896	703,360	441,661	21,631

REFERENCE

New Zealand born shewn thus ▭

Australian born —"— ▭

The number of the people born in foreign countries was found to be 19,080, being 2·71 per cent. of the whole. Besides these, 1,322 persons were returned as born at sea. The greatest number of foreigners were Germans (4,595). Next come persons born in China (3,719). Swedes and Norwegians numbered 2,775; and there were 2,125 persons from Denmark and her possessions.

The numbers of those born in France, Germany, the Netherlands, Portugal, Norway, Switzerland, China, Africa, and America all decreased since 1891.

The following table gives full details, and exhibits under the head of allegiance the number of British and foreign subjects in New Zealand:—

NUMBERS OF EACH NATIONALITY, AND INCREASE, 1891 TO 1896.

Where born.	Census, 1896.			Census, 1891.	Increase or Decrease.	
	Males.	Females.	Persons.	Persons.	Numerical.	Centesimal.
Total population	371,415	331,945	703,360	626,658	76,702	12·24
Total for specified birthplaces	371,008	331,748	702,756	625,641	77,115	12·33
British:—						
United Kingdom,—						
England	66,590	49,951	116,541	117,070	−529	−0·45
Wales	1,290	858	2,148	2,214	−66	−2·98
Scotland	28,890	21,545	50,435	51,916	−1,481	−2·85
Ireland	24,835	21,202	46,037	47,634	−1,597	−3·35
Australasia,—						
New Zealand ..	221,085	220,576	441,661	366,716	74,945	20·44
Queensland	451	479	930	481	449	93·35
New South Wales ..	2,299	2,237	4,536	2,833	1,703	60·11
Victoria	5,076	5,395	10,471	8,941	1,530	17·11
South Australia ..	607	615	1,222	983	239	24·31
Western Australia ..	60	52	112	76	36	47·37
Tasmania	1,697	1,463	3,160	2,629	531	20·20
Australia (colony not stated)	596	604	1,200	..	..	..
Fiji	68	83	151	105	46	43·81
Other British Possessions,—						
Gibraltar	21	28	49	50	−1	−2·00
Malta	48	23	71	61	10	16·39
India and Ceylon, &c. ..	767	574	1,341	1,168	173	14·81
Cape of Good Hope ..	118	128	246	285	−39	−13·68
St Helena	30	20	50	55	−5	−9·09
British North America, Canada	851	561	1,412	1,447	−35	−2·42
West Indies	175	72	247	238	9	3·78
Others (*a*)	191	143	334	294	40	13·61
Foreign,—						
Austria-Hungary ..	749	132	881	564	317	56·21
Belgium	91	47	138	115	23	20·00
Denmark and Possessions	1,373	752	2,125	2,053	72	3·51
France and Possessions ..	494	204	698	711	−13	−1·83
Germany	3,010	1,585	4,595	4,663	−68	−1·46

(*a*.) Norfolk Island, 30; Pacific Islands (British), 31; Straits Settlements, 20; Hongkong, 6; Mauritius, 54; British South Africa, 121; Natal, 13; West Africa, 8; East Africa, 2; British Guiana, 35; British Honduras &c., 8; Falkland Islands, 6.

Where born.	Census, 1896. Males.	Females.	Persons.	Census, 1891. Persons.	Increase or Decrease. Numerical.	Centesimal.
Foreign,—*continued.*						
Greece	95	32	127	94	33	35 11
Italy	338	85	423	397	26	6·55
Netherlands and Possessions	115	17	132	143	−11	−7·69
Poland	70	31	101	99	2	2 02
Portugal and Possessions	149	24	173	205	−32	−15·61
Russia and Possessions	330	35	365	320	45	14·06
Spain and Possessions ..	63	25	88	76	12	15·79
Sweden	1,310	204	1,514	1,414	100	7·07
Norway	892	369	1,261	1,288	−27	−2·10
Switzerland	258	84	342	362	−20	−5·52
Other European Countries (*b*)	17	13	30	34	−4	−11·76
China	3,695	24	3,719	4,470	−751	−16·80
Africa	72	62	134	183	−49	−26·78
America (North America)	620	349	969	1,016	−47	−4·63
United States of America	542	238	780	667	113	16·94
Other Foreign Countries (*c*)	333	152	485	276	209	75·72
At Sea	647	675	1,322	1,295	27	2·08
Unspecified	407	197	604	1,017	−413	−40·61
Allegiance.						
British subjects	360,238	329,765	690,003	612,064	77,939	12·73
Foreign subjects	11,177	2,180	13,357	14,594	−1,237	−8·47

(*b*.) Turkey, 25; Roumania, 4; Montenegro, 1.

(*c*.) Syria, 217; Arabia, 4; Persia, 4; Japan, 15; Argentine, 10; Brazil, 21; Chili, 19; Hayti, 2; South America, &c., 78; Pacific Islands, 115.

Separating persons of European descent born in Asia from those of Asiatic race leaves the following: Chinese, 3,685 (males, 3,671; females, 14); Indians, 46 males; Syrians, 195 (males, 153; females, 42); Arabs, 4 males; Persians, 4 (males, 3; female, 1); Japanese, 15 (males, 7; females, 8). Total Asiatics, 3,949 (males, 3,884; females, 65).

Ages: Minors, Adults, and Old People.

The number of persons under 21 years in April last was 350,735, and over 21 years 351,783, besides 842 unspecified as to age, but nearly all adults.

Comparison of the population under and over 21 years for 1886, 1891, and 1896 shows that the number over 21 years is increasing in proportion to the population at all ages.

Proportions per Cent. of Persons—All Ages.

	1886.	1891.	1896.
Under 21 years	53·47	52·46	49·94
Over 21 years	46·53	47·54	50·06
	100·00	100·00	100·00

The males under 21 years in 1896 were 176,926, and the adults 193,904, leaving 585 unspecified as to age, but of whom few were children. The females under 21 numbered 173,809, and adults 157,879, leaving 257 unspecified. The proportions per cent. of population over 21 years of age of each sex are higher for 1896 than for 1891.

PROPORTIONS PER CENT.

	Males.		Females.	
	1891.	1896.	1891.	1896.
Under 21 years	49·69	47·72	55·57	52·39
Over 21 years	50·31	52·28	44·43	47·61
	100·00	100·00	100·00	100·00

The proportion of aged people in the colony increases with time, and the progression is very important to notice. The figures for nine census years, extending from 1864 to 1896 are quoted:—

PERSONS 65 YEARS AND UPWARDS PER CENT. OF POPULATION.

1864 .. 0·63	1874 .. 1·22	1886 .. 1·81
1867 .. 0·86	1878 .. 1·29	1891 .. 2·29
1871 .. 1·08	1881 .. 1·41	1896 .. 2·95

The numbers at the age-periods most often in request may be described thus: Infancy and extreme youth (under 5 years)—males, 42,448; females, 41,211: School age (5 to 15 years)—males, 86,605; females, 84,887: Women at the reproductive age (15 to 45 years)—158,214: The athletic age (21 to 40 years)—males, 103,613; females, 95,648: The militia age (17 to 55 years)—males only, 188,086: The elderly period of life (55 to 65 years)—males, 24,756; females, 14,875: Old-age (65 years and upwards)—males, 12,503; females, 8,253.

The total number of males liable to be called out for service in the militia in April last was, in round numbers, 130,000, consisting of all males between 17 and 40 years, with the unmarried between 40 and 55 years, less the exemptions, numbering about 18,000 persons. They are classified as under:—

Class I.	Unmarried, between 17 and 30 years ..	75,828
Class II.	Married, between 17 and 30 years ..	12,973
	Unmarried, between 30 and 40 years ..	16,893
Class III.	Married, between 30 and 40 years ..	29,360
	Unmarried, between 40 and 55 years ..	12,894
		147,948
	Deduct exemptions ..	18,000
		129,948

OCCUPATIONS.

The population, specified as to occupation, is divided into two sections—

	Totals.	Males.	Females.
Breadwinners	292,932	239,862	53,070
Dependents, or non-breadwinners	408,735	130,729	278,006
Occupation not stated ..	1,693	824	869

The dependent population consists chiefly of wives, relatives, and others employed in household duties but unpaid, children, persons supported by charity, &c. Its proportion to the whole increases with the process going on of equalisation in numbers of the sexes.

The male breadwinners were nearly twice as numerous as the male dependents, who were mostly under fifteen years of age, but the female dependents were more than five times as many as the breadwinners of that sex.

Breadwinners were divided into six classes :—

Primary Producers.—Males, 103,016; females, 3,114. This is the most important class numerically. It includes persons engaged in agricultural and pastoral pursuits, fishing, and mining.

Males 27·80, females 0·94 per cent. of population of either sex.

Industrial.—Males, 68,571; females, 13,243: persons engaged in manufacture or other processes where materials are employed combined.

Males 18·50, females 4·00 per cent.

Commercial.—Males, 46,262; females, 4,118. Persons engaged in trade (males 24,703, females 3,364) are most numerous. Transport comes next (males 16,612, females 325). In finance or property: males 4,031, females 429. In storage, males 916.

The commercial group forms 12·48 per cent. of the male and 1·24 per cent. of the female population.

Professional.—Males, 11,999; females, 7,247. These are persons, not otherwise classed, engaged in Government, defence, law and order, or ministering to religion, charity, health, education, art, science, or amusement.

Males 3·24, females 2·19 per cent.

Domestic (but directly earning money).—Males, 5,880; females, 22,930: persons supplying board and lodging, or performing personal services for which payment is rendered.

Males 1·59, females 6·93 per cent.

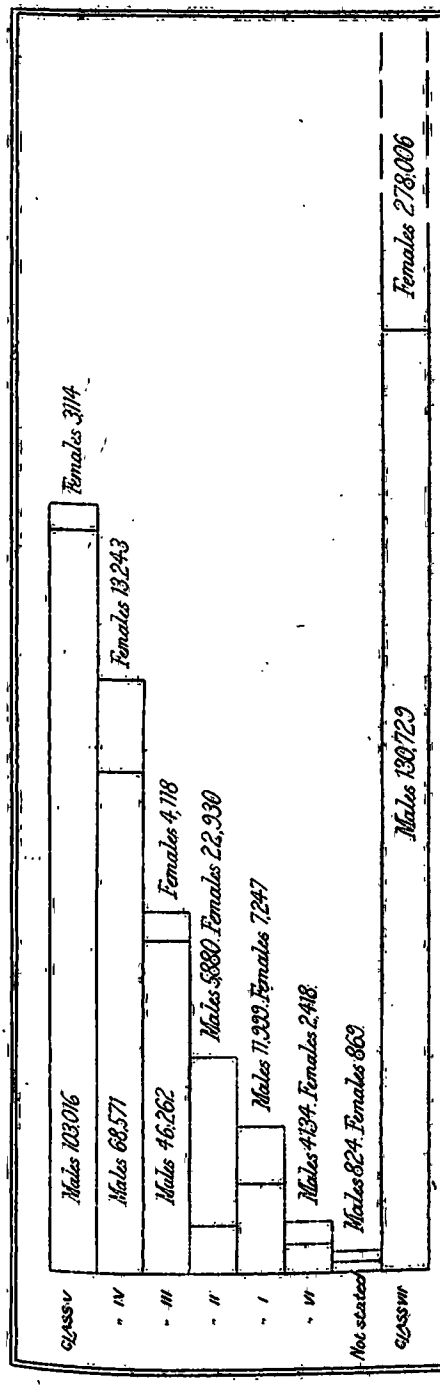
Indefinite.—Males, 4,134; females, 2,418: persons living on incomes earned in the past, or indefinitely described.

Males 1·11, females 0·73 per cent.

No less than 35·28 per cent. of the male population are shown to be dependent, and 83·97 per cent. of the females. These consist of 127,211 males and 275,716 females dependent upon natural guardians; and 3,518 males and 2,290 females, persons dependent upon the State, or upon public or private support. The greater number of those dependent upon natural guardians are scholars and students. There are also a large number of dependent relatives who were not stated to be performing domestic duties, and, of females, many persons performing domestic duties for which remuneration is not paid.

Employers and Employed.

The breadwinners of the colony are also classified according to the grade of their occupations, by which means the entire population can be brought under six heads :—



Occupations.

REFERENCE.

Section A. Breadwinners

	PERSONS.
Class V. Agricultural, Pastoral and other Primary producers	
Sub class A. Agricultural	73,221
B. Pastoral	10,079
C. Mineral	18,530
D. Other Primary producers	4,240
Class IV. Industrial	81,814
Class III. Commercial	
Sub class A. Property and Finance	4460
B. Trade	28,067
C. Storage	916
D. Transport & Communication	16,337
Class II. Domestic	28,810
Class I. Professional	13,246
Class VI. Indefinite	6,552

Section B. Non-breadwinners (dependents)

Class VII. Dependents.	
Sub class A. Dependent on natural guardians	402,927
B. Dependent upon the State, or upon public or private support	5,808
Occupations not stated	1,633
	703,360

Breadwinners shown thus ▭

Dependents — " — ▭

	Males.	Per Cent. of Breadwinners.	Females.	Per Cent. of Breadwinners.
Employers	28,818	12·02	1,627	3·06
Independent workers ..	42,599	17·76	5,731	10·80
Wage-earners ..	132,727	55·33	37,168	70·04
Unemployed ..	14,759	6·15	2,637	4·97
Relatives assisting, and not specified ..	20,959	8·74	5,907	11·13
Total Breadwinners	239,862	100·00	53,070	100·00
Dependents ..	130,729	..	278,006	..
Not stated	824	..	869	..
Totals ..	371,415	..	331,945	..

The proportion of the male breadwinners who are employers (12·02 per cent.) is nearly the same as in 1891 (11·98 per cent.). On the female side the proportion of employers was 3·06 per cent. at both censuses. Male wage-earners, employed or unemployed, were 61·48 per cent., against 58·10 per cent. in 1891. Female wage-earners, whether in work or not, were 75·01 per cent. in 1896, but only 61·53 per cent. in 1891, indicating a growing use of female labour.

The proportion of employers in New Zealand does not differ much from the rates obtaining in three of the neighbouring colonies in 1891:—

Employers.	Males Per Cent. of Breadwinners.	Females Per Cent. of Breadwinners.
New Zealand (1896)	12·02	3·06
New South Wales (1891) ..	14·22	3·53
Victoria (1891)	10·19	2·68
Tasmania (1891)	10·70	2·98

The Unemployed.

The unemployed male population in New Zealand in April, 1896, formed 6·1 per cent. of the male breadwinners, and 3·9 per cent. of the whole male population. The proportions for the two principal Australian Colonies in 1891 were not much lower:—

Unemployed Males per 100 of Male Breadwinners.

New South Wales (1891)	5·11
Victoria (1891)	5·25
New Zealand (1896)	6·15

Of the male unemployed,—

4,060 were industrial workers imperfectly defined (chiefly general labourers).

3,916 primary producers (2,174 agricultural, 537 pastoral, 935 mining, gold, coal, &c., 196 bushmen, and 74 fishermen and others).

1,511 carpenters, masons, road- and railway-works labourers, &c.

905 connected with road, railway, tram, or sea and river traffic.

887 printers and manufacturers of tools, implements, furniture, carriages, &c.
516 general dealers, mercantile clerks, salesmen, &c.
440 workers in metals, &c. (foundry hands, &c.).
383 workers in textile fabrics, dress, and fibrous materials.
327 workers in food, drinks, narcotics, and stimulants.
319 dealers in food, drinks, narcotics, and stimulants,—

The balance being fairly evenly distributed over the remaining Orders of Occupations.

Of the regular agricultural workers, only three males in every hundred were found to be unemployed.

It was in the industrial class, not the primary producers from the land, that by far the largest proportion of unemployed to the total of the class were found. On the whole class the proportion was 11·44 per cent. of males and 5·66 of females. The proportion was high among general and road labourers, printers and bookbinders, boiler-makers and fitters, coachbuilders and wheelwrights, shipwrights, cabinetmakers and upholsterers, tailors, brickmakers, blacksmiths, stonemasons and bricklayers, carpenters, plasterers, housepainters, and plumbers.

Generally, the results of the investigation into the occupations of the people agree with the result of the inquiry into the development of manufactures and works. It is found in regard to industries that spring directly from land settlement, such as butter- and cheese-making, meat-freezing, and sawing of timber, the development since 1891 was considerable; but in regard to some industries, like iron foundries, shipbuilding, &c., the results were in some cases not very good. The occupation tables show that considerable numbers of persons who belonged to such callings, including the building and allied trades, were unemployed at the time of the census. The exact number of the 14,759 males and 2,637 females unemployed belonging to each specific occupation will be found in the Census volume, page 332.

Grades of Occupation.

The numbers and proportions of persons of each sex in the different classes of occupation, divided according to grade—*i.e.*, employers, independent workers, wage-earners, unemployed, and relatives assisting, will be found in the statements on the pages following.

The classes are divided into 24 orders, which again are divided into 108 sub-orders. The items of the sub-orders are the specific occupations. In the tables given in the census report and volume each specific occupation is given according to the classification, and explanatory notes showing the unskilled assistance and other particulars included with the numbers for the various industries, &c.

Occupations.	Males.						Females.					
	Employers.	In Business on own Account but not employing other Persons.	Working for Wages or Salary.	Wage-earners unemployed.	Relatives assisting but not receiving Wages, and Others undescribed.	Total Males.	Employers.	In Business on own Account but not employing other Persons.	Working for Wages or Salary.	Wage-earners unemployed.	Relatives assisting but not receiving Wages, and Others undescribed.	Total Females.
Section A.—Breadwinners.												
I. Professional	937	1,733	8,763	321	245	11,999	42	970	5,429	341	465	7,247
II. Domestic	1,286	663	3,470	245	216	5,880	304	784	19,711	1,424	707	22,930
III. Commercial—												
A. Property and Finance	412	1,047	2,287	63	222	4,031	31	214	15	..	169	429
B. Trade	3,833	4,200	14,746	1,214	710	24,703	189	839	1,646	66	624	3,364
C. Storage	48	41	751	63	13	916	..	..	..	..	..	..
D. Transport and Communication ..	432	1,174	13,929	905	172	16,612	6	3	298	9	9	325
IV. Industrial	6,235	5,397	47,973	7,846	1,120	68,571	494	1,749	9,887	750	363	13,243
V. Primary Producers—												
A. Agricultural	13,271	16,764	22,936	2,174	15,343	70,488	503	574	79	..	1,577	2,733
B. Pastoral	1,230	712	6,787	537	440	9,706	47	77	91	2	156	373
C. Mineral	423	9,496	7,416	935	313	18,583	4	..	..	..	3	7
D. Other Primary Producers ..	196	518	3,183	270	72	4,239	..	..	..	..	1	1
VI. Indefinite	515	854	486	186	2,093	4,134	7	521	12	45	1,833	2,418
Totals	28,818	42,599	132,727	14,759	20,959	239,862	1,627	5,731	37,168	2,637	5,907	53,070
Section B.—Dependents (Non-breadwinners.)												
VII. Dependents—												
A. On Natural Guardians	..	..	..	..	..	127,211	..	..	..	..	..	275,716
B. On the State or public charity ..	..	..	..	..	..	3,518	..	..	..	..	..	2,290
Not stated	..	..	..	..	..	824	..	..	..	..	..	869
Totals	..	..	..	..	..	371,415	..	..	..	..	..	331,945

OCCUPATIONS.—PROPORTION OF EMPLOYERS AND EMPLOYED IN EACH CLASS.

Occupations.	Males.						Females.					
	Employers.	In Business on own Account but not employing other Persons.	Working for Wages or Salary.	Wage-earners unemployed.	Relatives assisting but not receiving Wages, and Others undescribed.	Total Males.	Employers.	In Business on own Account but not employing other Persons.	Working for Wages or Salary.	Wage-earners unemployed.	Relatives assisting but not receiving Wages, and Others undescribed.	Total Females.
Section A.—Breadwinners.												
I. Professional	7·81	14·44	73·03	2·68	2·04	100·00	0·58	13·38	74·91	4·71	6·42	100·00
II. Domestic	21·87	11·28	59·01	4·17	3·67	100·00	1·33	3·42	85·96	6·21	3·08	100·00
III. Commercial												
A. Property and Finance	10·22	25·97	56·74	1·56	5·51	100·00	7·23	49·88	3·50	..	39·39	100·00
B. Trade	15·52	17·00	59·69	4·92	2·87	100·00	5·62	24·94	48·93	1·96	18·55	100·00
C. Storage	5·24	4·47	81·99	6·88	1·42	100·00	..	..	..	..	..	..
D. Transport and Communication ..	2·60	7·07	83·85	5·45	1·03	100·00	1·85	0·92	91·69	2·77	2·77	100·00
IV. Industrial	9·09	7·87	69·96	11·44	1·64	100·00	3·73	13·21	74·66	5·66	2·74	100·00
V. Primary Producers—												
A. Agricultural	18·83	23·78	32·54	3·08	21·77	100·00	18·41	21·00	2·89	..	57·70	100·00
B. Pastoral	12·67	7·34	69·93	5·53	4·53	100·00	12·60	20·64	24·40	0·54	41·82	100·00
C. Mineral	2·28	51·10	39·91	5·03	1·68	100·00	57·14	..	..	..	42·86	100·00
D. Other Primary Producers	4·62	12·22	75·09	6·37	1·70	100·00	..	..	..	..	100·00	100·00
VI. Indefinite	12·46	20·66	11·75	4·50	50·63	100·00	0·29	21·55	0·49	1·86	75·81	100·00
Totals	12·01	17·76	55·34	6·15	8·74	100·00	3·06	10·80	70·04	4·97	11·13	100·00

SECTION II.—VITAL STATISTICS.

BIRTHS.

THE number of births registered in the colony during 1896 was 18,612, or 26·33 in every 1,000 persons living. The rate is lower than that for the preceding year, and indeed since the year 1881 has steadily declined. The number of births registered in a year reached its maximum in 1884, when it stood at 19,846, after which it fell to 17,876 in 1892, rising again to 18,612 in 1896, the number stated previously.

The figures for each year are worthy of notice, especially in connection with the subsequent particulars given as to marriages solemnised and the growth of population :—

Year.	Number of Births.	Rate per 1,000 of Population.	Year.	Number of Births.	Rate per 1,000 of Population.
1881	18,372	37·95	1889	18,457	30·07
1882	19,009	37·32	1890	18,278	29·44
1883	19,202	36·28	1891	18,273	29·01
1884	19,846	35·91	1892	17,876	27·83
1885	19,693	34·35	1893	18,187	27·50
1886	19,299	33·15	1894	18,528	27·28
1887	19,135	32·09	1895	18,546	26·78
1888	18,902	31·22	1896	18,612	26·33

While this process of a diminishing birth-rate has been going on the marriages have been increasing numerically, and the population of the colony also :—

Year.	Number of Marriages.	Mean Population (excluding Maoris).	Year.	Number of Marriages.	Mean Population (excluding Maoris).
1881	3,277	493,482	1889	3,632	612,716
1882	3,600	509,309	1890	3,797	620,780
1883	3,612	529,292	1891	3,805	629,783
1884	3,800	552,590	1892	4,002	642,245
1885	3,813	573,362	1893	4,115	661,349
1886	3,488	582,117	1894	4,178	679,196
1887	3,563	596,374	1895	4,110	692,417
1888	3,617	605,371	1896	4,843	706,846

In the year 1881 there were in New Zealand 5·72 births to every marriage in the previous year, and in 1896 the proportion had fallen to 4·32 births to each marriage.

New Zealand had in 1880 the highest birth-rate of all the Australasian Colonies, 40·78, but now the proportion is just the reverse, excepting in case of Western Australia, where the conditions are wholly peculiar. The fall over 10 years is calculated :—

BIRTH-RATES PER 1,000 OF POPULATION.

Colony.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Queensland	38·09	37·77	36·27	40·95	36·35	35·84	33·73	31·86	32·85	30·06
New South Wales ..	36·42	36·18	33·73	35·35	34·50	34·41	32·23	31·47	30·66	28·56
Victoria	32·39	32·49	32·95	33·60	33·57	32·54	31·25	29·16	28·57	27·28
South Australia ..	34·63	33·34	32·37	32·75	33·92	32·32	31·71	30·49	30·23	28·46
Western Australia ..	37·34	35·88	37·14	32·55	34·85	33·01	34·14	27·49	25·62	22·65
Tasmania	33·87	33·10	31·94	33·49	33·37	32·48	33·92	31·13	30·10	28·07
New Zealand	32·09	31·22	30·07	29·44	29·01	27·83	27·50	27·28	26·78	26·33

With a fall in the birth-rate are found by the census lower numbers in 1896 of each sex living at the period under five years than at the next period, which is unsatisfactory, as evidencing that there are not now sufficient living at the earliest years to come on and maintain the number of those of five years and under ten now found in the tables. Thus the census proves the correctness of the birth-rates to a great extent, tending to show that the results of the statistics describe the true state of affairs.

It was remarked in the report of the census of 1891 that the marriage rate in New Zealand, from being the highest in the Australasian Colonies, had fallen to be the lowest, and that the same process had been going on in regard to birth rates. The lapse of five years left the position almost the same, the marriage rate being lower for 1895 than in Queensland, New South Wales, Victoria, and Western Australia, though slightly higher than in Tasmania and South Australia. But in 1896 the marriages showed a remarkable increase, and the rate rose to 6·85 per 1,000 of population.

MARRIAGE RATES PER 1,000 OF POPULATION.

	1874.	1886.	1891.	1895.	1896.
Queensland	8·62	8·67	7·18	6·23	6·05
New South Wales	7·70	7·99	7·39	6·35	6·59
Victoria	6·33	7·84	7·69	6·00	6·48
South Australia	8·00	6·24	7·31	5·88	6·20
Western Australia	6·96	7·98	8·00	6·83	8·45
Tasmania	6·83	7·26	6·63	5·32	5·88
New Zealand	8·81	5·99	6·04	5·94	6·85

In April, 1891, New Zealand had 83,204 children living under the age of 5 years, and in 1896 the number was 83,659, an increase of only 455, although the population at all ages increased in the quinquennium by 12·24 per cent. Between 1886 and 1891 the children living under 5 years actually decreased in number by 3,624, the increase of population of all ages (8·33 per cent.) being less than between 1891 and 1896 (12·24 per cent.). The number of children under one year to the total population at all ages, according to the results of three censuses, was :—

	Children under One Year.	Total Population (all Ages).
Census, 1886	18,355	578,482
" 1891	16,443	626,658
" 1896	17,070	703,360

Thus, in 1886, with a population of 578,482 persons, there were 18,355 children under one year, against 17,070 children of that age in 1896, with a population of 703,360 persons.

The births registered in 1885 were 19,693, against 18,546 in 1895, and the birth-rate fell from 34·35 per 1,000 of the population in the former year to 26·78 in the latter.

Deducting 1,637, the number of deaths of children under one year registered in 1895, from 18,546, the number of births for that year, leaves 16,909, or within 161 of the living children under one year at the time of the last census.

In the United States the birth-rates per 1,000 for 1880 and 1890 were respectively 36·0 and 30·7; in England and Wales, 34·2 and 30·2; in Scotland, 33·6 and 30·2; in Ireland, 24·7 and 22·3; in France, 24·5 and 21·8; in Belgium, 31·1 and 28·7; in the German Empire, 37·6 and 35·7; in Austria, 38·0 and 36·7; in Switzerland, 29·6 and 26·6; in Denmark, 31·8 and 30·6; in Norway, 30·7 and 30·3; and in the Netherlands, 35·5 and 32·9.

The birth-rates for nine years in Great Britain and certain countries of the European Continent are given from the report of the Registrar-General of England. The rates in England and Wales, and in Scotland, are higher than those in New Zealand, but the rate for Ireland is lower. For 1890 and following years France has the lowest rate of all quoted.

BIRTH-RATES IN EUROPEAN COUNTRIES, 1887 TO 1895.

Countries.	Number of Births per 1,000 of Mean Population.								
	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Hungary	44·1	43·8	43·7	40·3	42·3	40·3	42·5	41·3	41·5
Austria	38·2	37·9	37·9	36·7	38·1	36·2	37·9	36·7	38·6
Italy	39·0	37·6	38·4	35·9	37·3	36·3	36·6	35·7	35·1
German Empire ..	36·9	36·6	36·4	35·7	37·0	35·7	36·7	35·8	36·1
Netherlands ..	33·7	33·7	33·2	32·9	33·7	32·0	33·8	32·7	32·8
England and Wales ..	31·9	31·2	31·1	30·2	31·4	30·5	30·8	29·6	30·4
Scotland	31·8	31·3	30·9	30·4	31·2	30·8	31·0	30·1	30·4
Norway	30·8	30·8	29·7	30·3	30·9	29·6	30·7	29·7	30·5
Sweden	29·7	28·8	27·7	28·0	28·3	27·0	27·4	27·1	..
Belgium	29·4	29·1	29·5	28·7	29·6	28·9	29·5	29·0	28·5
Switzerland ..	27·9	27·7	27·6	26·6	28·3	28·1	28·5	28·2	28·0
France	23·5	23·1	23·0	21·8	22·6	22·1	22·9	22·4	21·9
Ireland	23·1	22·8	22·7	22·3	23·1	22·5	23·0	22·9	23·2

The male births in New Zealand in 1896 numbered 9,511, and the female 9,101: the proportion was thus 104·50 males to 100 females. In 1895 the proportion was 104·86 males, and in 1894, 104·59. There are on an average more male to female births in each of the Australasian Colonies than in England, but the proportion of male births is still greater in many European countries.

There were 182 cases of twin births (364 children) in 1896. The

number of children born was 18,612; the number of mothers was 18,430: thus on an average 1 mother in every 101 gave birth to twins. In 1895 the proportion was one in 93, in 1894 one in 103, and in 1890 one in 94.

The births of 834 children were illegitimate: thus 44 in every 1,000 children born were born out of wedlock.

The following table gives the rates of illegitimacy in each of the Australasian Colonies. The rate in New Zealand is less than in any other of the Australasian Colonies except South and Western Australia:—

PROPORTION OF ILLEGITIMATE BIRTHS IN EVERY 100 BIRTHS.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1885	4·08	4·60	4·36	2·42	..	4·55	3·20
1886	3·97	4·65	4·75	2·38	..	4·13	3·12
1887	4·49	4·59	4·78	2·49	..	3·40	3·23
1888	4·13	5·08	4·80	2·67	..	3·62	3·05
1889	4·68	5·33	4·97	2·47	..	4·02	3·32
1890	4·85	5·26	5·09	2·50	..	4·05	3·30
1891	4·65	5·36	5·36	2·93	..	3·72	3·49
1892	5·05	5·71	5·59	2·93	5·89	4·75	3·32
1893	4·97	6·16	5·46	2·84	4·17	4·41	3·70
1894	4·52	6·14	5·50	3·05	4·66	5·09	3·80
1895	4·93	6·51	5·33	3·13	4·47	4·97	4·50

The rates in all these colonies, except South Australia, are somewhat higher than the rate in England, which was 4·2 in 1895. In Scotland the rate was as high as 7·6 in the year 1890. In Ireland it was only 2·7 in 1891. Of European continental countries Austria has the highest rate, 14·7. In the German Empire it is 9·3, in France 8·1, in Italy 6·8, and in Switzerland 4·6.

An important Act was passed in 1894, entitled the Legitimation Act, which makes provision for the legitimation of children born before marriage on the subsequent marriage of their parents. Under this Act any child born out of wedlock, whose parents afterwards marry, is deemed to be legitimised by such marriage on the birth being registered in the manner prescribed by the Act. For legitimation purposes Registrars must register a birth when called upon to do so by any person claiming to be the father of an illegitimate child; but such person is required to make a solemn declaration that he is the father, and that at the time of the birth there existed no legal impediment to his marriage with the mother of the child. He has also to produce the evidence of his marriage. It will thus be seen that in cases dealt with under the Act registration becomes the test of legitimacy. In the December quarter of 1894, 11 children were legitimised; in 1895 the number was 68, and in 1896, 56, making altogether 135 legitimations since the passing of the law. It appears likely that the Act will often be taken advantage of in case of half-castes.

In 1891 the average number of births to a marriage was 4·64, against 4·32 in 1896. In the Australian Colonies a similar decrease is noticeable. It has been remarked that in all the Australian Colonies, except Tasmania, and possibly New South Wales, the average number of children to a marriage tends to decrease. In Victoria the number for the year 1880 was 4·99, but fell to 4·07 in 1892. In New South Wales the figures are 5·0 and 4·46 for the same years respectively.

The following statement shows the average number of children to a marriage in various European countries :—

	Children to each Marriage.		Children to each Marriage.
Ireland ..	.. 5·46	England ..	.. 4·16
Italy ..	.. 4·56	Sweden ..	.. 4·01
Scotland ..	.. 4·43	Denmark ..	.. 3·55
Holland ..	.. 4·34	France ..	.. 2·98
Belgium ..	.. 4·21		

The excess per cent. of births over deaths in each of the Australasian Colonies for a mean of ten years, ending with 1894, is stated in the Victorian Year-book as under :—

EXCESS PER CENT. OF BIRTHS OVER DEATHS.

New Zealand ..	.. 208	Tasmania ..	.. 131
South Australia ..	.. 170	Western Australia	.. 116
New South Wales	.. 156	Victoria	.. 111
Queensland ..	.. 142		

For the year 1894 New Zealand again occupies the first place.

NATURALISATION.

Aliens residing in the colony may, on taking the oath of allegiance to Her Majesty, obtain letters of naturalisation entitling them to enjoy all the rights and privileges that a natural born subject of the United Kingdom can enjoy or transmit within this colony. Three hundred and fifty-two aliens (341 men and 11 women) were naturalised in 1896.

As the diversity of nationalities is considerable, the following statement is given of the number belonging to each :—

NUMBER OF ALIENS NATURALISED IN 1896.

Natives of—	M.	F.	Natives of—	M.	F.
Norway and Sweden ..	93	3	United States of America ..	4	0
German Empire	85	4	Netherlands	4	0
Denmark	51	3	Greece	3	0
Italy	23	0	Syria	3	0
China	17	0	Belguim	2	0
Austria	15	0	Spain	2	0
Switzerland	14	1	Persia	1	0
Russia	14	0	Hayti	1	0
France	9	0			

The number of natives of each country naturalised during the last fifteen years is shown hereunder :—

Natives of—		Natives of—	
Germany	1,063	France	57
Sweden and Norway ..	766	Netherlands	31
Denmark	557	Greece	25
China	332	Portugal	19
Italy	127	United States of America ..	17
Switzerland	125	Belgium	13
Russia	125	Other countries	67
Austria	111	Total	3,435

By section 2 of "The Aliens Act Amendment Act, 1882," repealed and re-enacted by section 2 of "The Aliens Act Amendment Act, 1892," it is provided that when the father, or mother being a widow, has obtained naturalisation in the colony, every child who during infancy has become resident with them in New Zealand shall be deemed to be naturalised, and shall have the rights and privileges of a natural-born subject.

Marriages.

The marriages for 1896 show a remarkable increase on the number for the previous year. The number was 4,843, or 733 more than in 1895, which was 4,110. The marriage-rate rose from 5·94 per 1,000 persons living in 1895 to 6·85 in 1896, the latter being the highest rate obtained since 1884, when it stood at 6·87 per 1,000 persons. This improvement sets New Zealand in a good position relatively to the colonies in Australia.

The rates are shown for a series of years:—

Marriages per 1,000 of the Population.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1887 ..	8·21	7·42	7·62	6·31	7·58	6·71	5·97
1888 ..	8·63	7·37	8·03	6·70	7·18	6·58	5·97
1889 ..	8·37	6·76	8·14	6·47	6·99	6·50	5·94
1890 ..	8·49	7·14	8·21	7·06	5·80	6·64	6·12
1891 ..	7·18	7·39	7·69	7·31	8·00	6·63	6·04
1892 ..	6·67	6·77	6·64	6·51	7·29	6·51	6·23
1893 ..	5·91	6·40	5·99	6·26	6·34	5·51	6·22
1894 ..	5·70	6·20	5·98	6·09	6·24	5·43	6·15
1895 ..	6·23	6·35	6·00	5·88	6·83	5·32	5·94
1896 ..	6·05	6·59	6·48	6·20	8·45	5·88	6·85

But the improved rate shown for this colony in 1896 is still lower than the rate for many European countries.

Marriages in every 1,000 of the Population.

Hungary,	1895	8·4	France,	1895	7·1
Austria,	1895	8·1	Denmark,	1895	7·1
German Empire,	1895	7·9	Scotland,	1895	6·8
Belgium,	1895	7·7	Norway,	1895	6·4
Switzerland,	1895	7·5	Sweden,	1894	5·7
England and Wales,	1895	7·5	Spain,	1887	5·5
Italy,	1895	7·3	Ireland,	1895	5·0
Netherlands,	1895	7·3			

Of the marriages solemnised in 1896, 4,388 were between bachelors and spinsters, 141 between bachelors and widows, 214 between widowers and spinsters, and 100 between widowers and widows. Divorced men and women have been classified as bachelors or spinsters: 2 divorced men and 5 divorced women were married during the year.

The total number of marriages solemnized given above does not include marriages where both parties are of the aboriginal native race, such persons being exempted from the necessity of complying with the provisions of the Marriage Act, although at liberty to take advantage thereof. Only 6 marriages in which both parties were Maoris were contracted in 1896 in terms of the Act.

Of the marriages in the past year, 22·86 per cent. were solemnised by ministers of the Church of England, 25·01 per cent. by ministers of the Presbyterian Churches, 17·92 per cent. by ministers of the Wesleyan and other Methodist Churches, 10·26 per cent. by ministers of the Roman Catholic Church, 6·05 per cent. by ministers of other denominations, and 17·90 per cent. by Registrars.

The following shows the proportions of marriages by ministers of the principal denominations in the past seven years, and the percentages of these denominations to the total population:—

Denomination.	Percentage of Marriages.							Percentage of Denomination to Total Population in 1896.
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	
Church of England ..	21·66	22·18	20·78	23·06	22·86	22·74	22·86	40·27
Presbyterians ..	27·59	27·23	29·38	26·58	25·30	24·32	25·01	22·78
Wesleyans and other Methodists	15·58	14·72	14·82	16·13	15·99	15·69	17·92	10·45
Roman Catholics ..	10·45	10·07	9·74	8·99	10·08	11·19	10·26	14·07
Others ..	5·27	5·67	6·34	6·66	6·65	7·29	6·05	12·43
By Registrars ..	19·45	20·13	18·94	18·58	19·12	18·77	17·90	..
	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00

Marriage by the Registrar is found to be rather less frequent than it was five years ago, the percentage falling from 20·13 in 1891 to 17·90 in 1896.

Of the men married in 1896, 30, or 6·19 in every 1,000, and of the women 34, or 7·02 per 1,000, signed the register by marks.

The illiteracy of the people, as measured by the proportion of married persons who affix marks instead of signatures to the marriage register, has greatly decreased of late, having fallen since 1881 from 32·04 per 1,000 among men to 6·19 per 1,000, and from 57·98 per 1,000 to 7·02 per 1,000 among women. This is shown in a very striking manner by the following table:—

PERSONS IN EVERY 1,000 MARRIED WHO SIGNED BY MARK.

Denomination.	1881.		1886.		1891.		1896.	
	M.	F.	M.	F.	M.	F.	M.	F.
Church of England	16·59	27·15	9·33	12·00	8·29	10·66	0·90	5·42
Presbyterians ..	10·25	29·61	9·79	7·62	5·79	8·69	4·13	3·30
Wesleyans and other Methodists	32·41	41·79	6·33	14·78	8·93	10·71	5·76	5·76
Roman Catholics ..	117·78	133·33	46·45	65·57	31·33	18·28	6·04	12·07
Other denominations	10·36	20·72	11·49	22·99	9·26	..	..	..
By Registrars ..	39·22	93·51	35·98	62·03	27·42	43·08	18·45	14·99
Total marriages	32·04	57·98	19·21	28·96	13·93	16·82	6·19	7·02

The proportion of illiterates in 1896 was greatest among those married before Registrars. Previously the proportion was largest among Roman Catholics; but since 1881 it has, as shown by the table, most remarkably decreased.

Of the persons married in 1896, 95 bridegrooms and 945 brides were under 21 years of age—one of the bridegrooms was between 17 and 18 years of age, and 7 between 18 and 19. Of the brides, 7 were between 15 and 16, and 25 between 16 and 17 years of age. The proportion of men married is greatest at the ages of 25 to 30, and of women at from 21 to 25 years.

The following are the proportions of men and women married at each age-period to every 100 marriages in the years 1888 and 1896:—

Age.	1888.		1896.	
	M.	F.	M.	F.
Under 21 years	1·85	24·30	1·96	19·51
21 and under 25	28·17	42·05	26·14	40·64
25 " 30	33·81	21·15	38·47	25·89
30 " 40	26·02	8·98	24·04	10·22
40 " 50	6·69	2·74	5·80	2·66
50 " 60	2·52	0·61	2·31	0·91
60 " 70	0·88	0·14	1·05	0·15
70 and upwards	0·06	0·03	0·23	0·02

Registrars of Marriages are prohibited by law from issuing certificates for the marriage of minors without the consent of their parents or lawful guardians, if there be any in the colony. If a declaration be made in any case that there is no parent or lawful guardian in the colony, then a certificate may be issued after the expiration of fourteen days following the date on which the notice of intended marriage is given.

A marriage may not be solemnised except after the delivery to the minister or Registrar who officiates of a certificate issued by a Registrar authorising such marriage, and if any persons knowingly and wilfully intermarry without such certificate the marriage is null and void; and no clergyman or minister of any denomination is empowered to solemnise marriages until his name has been placed on the Registrar-General's list of officiating ministers for the year.

The ages at which persons may contract binding marriages are the same as in England—12 years for females and 14 for males. Marriage may be contracted at earlier ages than those stated, but would be voidable at the discretion of either of the parties upon reaching the age of 12 or 14, as the case may be, and without the necessity of proceedings in Court.

Although in New Zealand the age at which girls may legally marry is as above; nevertheless, by the criminal law, to unlawfully carnally know a girl under the age of 16 years is now a punishable offence. The age of consent was raised from 15 to 16 by statute passed in 1896.

The average age of the men married in this colony in 1896 was 29·74 years, and of the women, 25·28 years. In England the mean age of those whose ages were stated was (in the year 1894) 28·41 years for men, and 26·15 years for women. Thus the average age at marriage in the colony is higher for men, but lower for women, than the age in England.

The proportion of bridegrooms under 21 is much greater in England than in New Zealand; but the proportion of brides under 21 is greater in the colony.

In England, in 1891–95, of every 1,000 bridegrooms whose ages were stated, 56 were under 21 years of age, and of every 1,000 brides 183 were under 21 years of age. In New Zealand, in 1896, the proportions were 20 bridegrooms and 195 brides of similar ages in every 1,000 married:—

Year.	Bridegrooms under 21 in every 100.	Brides under 21 in every 100.	Year.	Bridegrooms under 21 in every 100	Brides under 21 in every 100.
1884	1·87	27·10	1892	1·62	20·14
1886	1·95	26·09	1894	1·44	19·53
1888	1·85	24·30	1896	1·96	19·51
1890	1·89	22·75			

The number of the clergy is given in the census of 1896 as 777. In 1891 the number returned was 732. Besides the regular clergy, there were 11 Mormon missionaries and 221 Salvation Army officers, of whom 112 were females; also 17 evangelists, 52 missionaries (11 women), and 45 preachers. The number of the clergy on the list of officiating ministers under the Marriage Act is 885, and the denominations to which they belong are shown on the following page.

NUMBER OF OFFICIATING MINISTERS, 1897.

Denomination.	No.	Denomination.	No.
Church of England	289	Church of Christ	10
Presbyterian Church of New Zealand	114	Independent Wesleyan ..	1
Presbyterian Church of Otago and Southland	84	Disciples of Christ	1
Roman Catholic Church ..	139	Brethren	1
Wesleyan Methodist Church ..	142	The New Church	1
Congregational Independents ..	18	The Forward Movement ..	1
Baptists	23	Salvation Army	8
Primitive Methodist Connection	29	Catholic Apostolic Church ..	2
Lutheran Church	12	Seventh-day Adventists ..	3
Hebrew Congregations	6	The Brotherhood Church ..	1
		Total	885

There were, at the time of the census, 25 theological students, 72 church officers such as sextons and others, and 82 members of religious orders not ministering to charity or education.

DEATHS.

The deaths in 1896 numbered 6,432, being equivalent to a rate of 9·10 in every 1,000 persons living. This is the lowest rate experienced since the year 1887, when the deaths were 10·29 per 1,000 of the population.

The actual number of deaths registered in 1887 was 6,137, with a mean population for the year of 596,374 persons; while in 1896 the population was 706,846, or 110,472 persons greater, and the deaths only 295 more than in the first-named year.

The death-rate in New Zealand contrasts very favourably with that in the other Australasian Colonies and in European countries, as will be seen by the figures given for a series of years:—

Country.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
New Zealand ..	10·54	10·29	9·43	9·44	9·66	10·35	10·06	10·23	10·19	9·91	9·10
Queensland ..	17·29	14·56	14·66	15·44	14·98	12·77	12·66	13·34	12·08	11·38	12·10
New South Wales ..	14·89	13·15	13·54	13·42	12·90	14·24	13·22	13·25	12·30	11·79	12·43
Victoria	15·15	15·70	15·34	17·54	16·10	16·24	13·63	14·11	13·13	13·25	13·34
South Australia* ..	13·38	12·77	12·52	11·49	12·40	13·26	11·38	13·42	11·64	11·25	11·48
Western Australia	21·56	16·83	15·91	14·19	11·26	16·96	16·63	15·27	14·00	17·32	16·45
Tasmania ..	14·58	15·45	14·11	14·10	14·74	15·00	13·53	13·47	12·43	11·38	11·56
England and Wales	19·5	19·1	18·1	18·2	19·5	20·2	19·0	19·2	16·6	18·7	..
Scotland	18·9	19·0	18·0	18·4	19·7	20·7	18·6	19·5	17·2	19·7	..
Ireland	17·8	18·2	17·9	17·4	18·2	18·4	19·4	17·9	18·2	18·4	..
Denmark ..	18·2	18·3	19·7	18·6	19·0	20·0	19·4	18·9	17·5	16·9	..
Norway	16·1	16·0	16·9	17·4	17·9	17·5	17·8	16·3	16·9	15·6	..
Sweden	16·6	16·1	16·0	16·0	17·1	16·8	17·9	16·8	16·4	..	..
Austria	29·4	28·9	29·2	27·3	29·4	28·2	28·8	27·2	27·8	27·6	..
Hungary	31·6	33·8	32·0	29·9	32·4	33·1	35·0	31·1	30·4	29·6	..
Switzerland ..	20·8	20·3	20·0	20·4	21·0	20·7	19·2	20·4	20·5	19·7	..
German Empire ..	26·2	24·2	23·7	23·7	24·4	23·4	24·1	24·6	22·3	22·2	..
Netherlands ..	21·8	19·7	20·4	20·1	20·5	20·7	21·0	19·2	18·5	18·6	..
France	22·5	22·0	21·8	20·5	22·6	22·6	22·6	22·8	21·2	22·3	..
Italy	28·7	28·0	27·6	25·6	26·4	26·2	26·3	25·3	25·1	25·2	..

*Excludin the Northern Territory.

In this statement New Zealand is conspicuous as showing the lowest death-rate. The rates for the principal colonies in Australia are a little higher, but still far below those for the United Kingdom or the European Continental States mentioned in the table.

Deaths and Death-rates of the four Principal Cities and their Suburbs.

In the earlier annual reports on the vital statistics of the four chief towns the central boroughs alone were dealt with, particulars respecting the suburbs not having been obtained. But this omission was held to be a grave defect, as the suburban death-rate may differ much from the death-rate at the centre. Steps were therefore taken early in 1895 to collect statistics of the suburban boroughs as well as of the four chief cities. As regards Auckland and Christchurch, the whole of the area usually recognised as suburban has not yet been brought under municipal government, and the statistics given below do not deal with such portions as still remain in road districts. The omission, however, is not very important, for there are in either case quite enough suburbs included within borough boundaries to give a fair idea of the death-rate of greater Auckland and greater Christchurch. As further boroughs are formed the vital statistics will be made to include them.

The total number of deaths registered for the four centres in 1896 was 1,918—viz., 1,302 in the cities, and 616 in the suburbs. In 1895 the number was 1,962: 1,368 in the cities, and 594 in the suburbs. Thus there was last year a decrease in the city deaths, while in the number of suburban deaths there was an increase.

By including the suburbs the death-rate for last year is lowered at each of the four centres, the difference being most noticeable in Auckland (1·30). The rates for the year are:—

	Death-rate per 1,000 of Population.
Auckland City	14·42
" and five suburban boroughs ..	13·12
Wellington City	11·59
" and three suburban boroughs ..	10·97
Christchurch City	11·49
" and four suburban boroughs ..	11·08
Dunedin City	9·60
" and eight suburban boroughs ..	9·12

The death-rate is thus shown to be highest in Auckland and lowest in Dunedin, Christchurch and Wellington taking second and third places respectively. The death-rate for the colony was 9·10 per 1,000 of mean population. The four centres, as might be expected, each show a higher average than this, and in fact the

excess is considerable at Auckland, Wellington, and Christchurch, and is found, though in smaller measure, at Dunedin.

If the number of deaths of infants under one year be excluded, the mortality among the rest of the population would be in the following ratio to the 1,000 living:—

Auckland (including suburbs)	.. .. ..	8·93
Wellington "	.. ..	8·63
Christchurch "	.. ..	8·20
Dunedin "	.. ..	7·64

The degree of infantile mortality may be exhibited in the proportion of deaths of children under one year of age to every 100 births. For 1896 the proportions at the chief centres are,—

Auckland (including suburbs)	.. .. ..	16·20
Wellington "	.. .. ..	9·65
Christchurch "	.. .. ..	12·87
Dunedin "	.. .. ..	7·27

Thus the proportion at Dunedin is considerably less than half that found at Auckland. Again, the percentage of deaths of children under 5 to the total number of deaths is—in Auckland, 39·96; in Wellington, 29·20; in Christchurch, 29·23; in Dunedin, only 21·00. The total of deaths under 5 is 613, or 31·96 per cent. of all deaths, as against 615 and 31·35 for 1895. The deaths of persons of 65 and upwards numbered 363 last year; in 1895 they were 345.

Excluding suburbs, and dealing only with the deaths in the four cities or central boroughs, the rates for 1896 are found to be lower than those for any previous year, except in Christchurch, where the proportion is higher in 1896. The deaths and death-rates for three years are given:—

Cities (excluding Suburbs).	Deaths, 1894.		Deaths, 1895.		Deaths, 1896.	
	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.
Auckland ..	484	15·41	471	14·87	453	14·42
Wellington ..	414	11·82	462	13·07	434	11·59
Christchurch ..	185	10·55	191	10·83	195	11·49
Dunedin ..	271	11·38	244	10·21	219	9·60

Omitting the deaths of infants under one year, and calculating the rate on the population of one year of age and upwards, does not alter the position of the four cities as regards magnitude of death-rate.

	Deaths per 1,000 of Population, excluding Infants (under One Year of Age).		
	1894.	1895.	1896.
Auckland (excluding suburbs)	11·53	11·02	10·02
Wellington „ ..	9·40	9·84	9·17
Christchurch „ ..	8·69	8·70	8·86
Dunedin „ ..	9·66	9·67	8·07

Subjoined is a table showing the rates of infant mortality in the four cities for each of the past five years, together with the mean rates for the period. In respect of both last year's rate and the mean rate, Auckland stands first and Dunedin fourth.

	Deaths of Children under One Year to every 100 Births.					
	1892.	1893.	1894.	1895.	1896.	Mean of Five Years.
Auckland (excluding suburbs) ..	14·28	12·64	15·12	14·86	16·48	14·67
Wellington „ ..	11·50	12·26	9·49	12·40	10·05	11·14
Christchurch „ ..	16·81	18·60	9·00	11·14	12·97	13·70
Dunedin „ ..	9·51	11·16	8·73	9·47	7·83	9·34

A comparison of the death-rates of the chief towns of New Zealand for 1896 with those of Australian capitals shows the rates in this colony to be generally lower:—

Principal Cities.	Deaths per 1,000 of Population. 1896.	Principal Cities.	Deaths per 1,000 of Population. 1896.
Perth (including suburbs) ..	20·65	Brisbane (inc. suburbs) ..	14·17
Hobart „ ..	16·17	Auckland „ ..	13·12
Melbourne „ ..	15·31	Wellington „ ..	10·97
Sydney „ ..	13·66	Christchurch „ ..	11·08
Adelaide „ ..	14·66	Dunedin „ ..	9·12

VITAL STATISTICS OF AUSTRALASIAN CAPITALS, 1896.

Chief Cities (including Suburbs).	Mean Population.	Births.		Deaths.		Excess of Births over Deaths.
		Total Number.	Rate per 1,000 of Population.	Total Number.	Rate per 1,000 of Population.	
Melbourne	450,334	12,769	28·35	7,121	15·81	5,648
Sydney	409,250	12,302	30·06	5,589	13·66	6,713
Adelaide	144,782	4,341	29·98	2,123	14·66	2,218
Brisbane	96,500	3,201	33·17	1,367	14·17	1,834
Perth	26,831	768	28·62	554	20·65	216
Hobart	36,927	917	24·83	597	16·17	320
Wellington	41,758	1,109	26·56	458	10·97	651

Deaths in the Colony at various Age-periods.

The average age at death of persons of either sex, in each of five years, was as follows :—

	Males.	Females.
1892	32·97 years	28·95 years.
1893	31·86 „	27·79 „
1894	36·64 „	31·59 „
1895	36·21 „	30·17 „
1896	36·80 „	32·41 „

Subjoined is a classified statement of the deaths of infants under one year during 1896, with the ratio of the deaths in each class to the 1,000 births during the year :—

Year.	Sex.	Under 1 Month.	1 and under 3 Months.	3 and under 6 Months.	6 and under 12 Months.	Total under 12 Months.
	NUMBER OF DEATHS.					
1896 ..	Male	319	115	181	202	817
	Female	247	114	123	138	622
	DEATHS TO THE 1,000 BIRTHS.					
1896 ..	Male	33·54	12·09	19·03	21·24	85·90
	Female	27·14	12·53	13·51	15·16	68·34

Eighty-six out of every thousand of male children born, and sixty-eight of every thousand females, are found to have died before attaining the age of one year. The mortality is thus nearly one in eleven of male children and one in fourteen of females, even in New Zealand, where conditions are far more favourable to infant life than in Australia, at least as far as relates to the cities.

It will also be seen from the figures that the chances of living during the first year of age are far greater in favour of female than of male infants. Thus, during the year 1896 there were—

100 deaths of males to 77 deaths of females under 1 month of age;
100 „ 99 „ from 1 to 3 months of age;
100 „ 68 „ from 3 to 6 months of age;
100 „ 68 „ from 6 to 12 months of age;
100 „ 76 „ under 12 months of age.

The rates of infantile mortality—that is, the proportion the deaths of children under one year of age bear to the births—are, as previously stated, higher in the Australian Colonies than in New Zealand. The following table gives the rate in the several colonies named for each of the ten years, 1883–92 :—

NUMBER OF DEATHS OF CHILDREN UNDER ONE YEAR OF AGE TO EVERY 100 BIRTHS.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Tasmania.	New Zealand.
1883 ..	13·34	11·48	11·44	14·56	12·39	10·39
1884 ..	14·74	12·62	11·37	13·42	9·98	7·93
1885 ..	14·85	13·12	12·57	11·34	11·26	8·92
1886 ..	12·59	12·85	12·73	12·62	10·48	9·84
1887 ..	11·29	10·59	13·00	11·12	10·09	9·38
1888 ..	12·07	11·09	12·75	9·59	9·43	7·07
1889 ..	13·62	12·50	15·21	9·42	10·64	7·89
1890 ..	10·05	10·45	11·74	9·65	10·55	7·87
1891 ..	10·12	11·89	12·62	9·09	9·45	9·12
1892 ..	10·68	10·60	10·68	9·67	9·91	8·92

Causes of Death.

The deaths registered in the colony during the last five years, when distributed among the several classes according to their assigned causes, give the rates shown hereunder:—

Causes of Death.	Rate per 10,000 living.				
	1892.	1893.	1894.	1895.	1896.
Zymotic diseases	15·67	17·95	14·12	11·24	10·24
Parasitic diseases	0·42	0·36	0·32	0·36	0·24
Dietetic diseases	1·31	1·07	0·63	0·81	0·86
Constitutional diseases	17·61	17·56	19·42	18·95	17·06
Developmental diseases	7·83	7·65	8·04	7·12	7·25
Local diseases	45·16	46·40	45·22	48·60	43·31
Violence	8·24	8·24	10·26	8·62	8·32
Ill-defined and not-specified causes ..	4·34	3·09	3·84	3·42	3·72
All causes	100·58	102·32	101·85	99·12	91·00

Forty-three in every one hundred deaths in 1896 were from local diseases, of which diseases of the nervous system formed 10 per cent., diseases of the circulatory system and of the respiratory system 9 per cent. (each), while diseases of the digestive system contributed 8 per cent. Constitutional diseases, including, with others, phthisis and cancer, comprised 17 per cent. of the total mortality. Ten per cent. of deaths were from zymotic causes, including 4 per cent. diarrhœal, and the same of miasmatic diseases. The violent deaths come next in proportion, being 8 per cent. of the whole.

Causes of Death.	Number of Deaths.			Proportion to Total Deaths.			Proportion per 10,000 living, 1896.	Proportion per 10,000 living, 1895.
	Male.	Female.	Total.	Male.	Female.	Total.		
Class I. Specific febrile or zymotic diseases,—				Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Order 1. Miasmatic diseases	154	163	317	4·08	6·14	4·93	4·48	6·62
" 2. Diarrhœal diseases	176	158	334	4·66	5·95	5·19	4·72	3·35
" 3. Malarial diseases	2	...	2	0·05	..	0·03	0·03	0·09
" 4. Zoogenous diseases	...	...	...	...	...	...	...	...
" 5. Venereal diseases	20	6	26	0·53	0·22	0·41	0·37	0·34
" 6. Septic diseases	22	23	45	0·58	0·87	0·70	0·64	0·84
Total Class I.	374	350	724	9·90	13·18	11·26	10·24	11·24
Class II. Parasitic diseases	6	11	17	0·16	0·41	0·26	0·24	0·36
Class III. Dietetic diseases	46	15	61	1·22	0·56	0·95	0·86	0·81
Class IV. Constitutional diseases	635	571	1,206	16.82	21·50	18·75	17·06	18·95
Class V. Developmental diseases	287	225	512	7·60	8·47	7·96	7·25	7·12
Class VI. Local diseases,—								
Order 1. Diseases of nervous system	427	318	745	11·31	11·97	11·58	10·54	10·97
" 2. Diseases of organs of special sense	4	3	7	0·11	0·12	0·11	0·10	0·12
" 3. Diseases of circulatory system	391	261	652	10·36	9·83	10·14	9·23	9·43
" 4. Diseases of respiratory system	427	261	688	11·30	9·83	10·70	9·72	13·78
" 5. Diseases of digestive system	343	244	587	9·08	9·19	9·12	8·31	8·61
" 6. Diseases of lymphatic system	7	7	14	0·19	0·26	0·22	0·20	0·33
" 7. Diseases of urinary system	168	51	219	4·45	1·92	3·40	3·10	3·34
" 8. Diseases of reproductive system,—								
(*a.*) Of organs of generation	1	23	24	0·03	0·86	0·37	0·34	0·46
(*b.*) Of parturition	...	77	77	...	2·90	1·20	1·09	0·99
" 9. Diseases of locomotive system	15	10	25	0·40	0·37	0·39	0·35	0·23
" 10. Diseases of integumentary system	14	9	23	0·37	0·34	0·36	0·33	0·34
Total Class VI.	1,797	1,264	3,061	47·60	47·59	47·59	43·31	48·60
Class VII. Violence,—								
Order 1. Accident or negligence	407	106	513	10·78	3·99	7·97	7·26	7·27
" 2. Homicide	2	3	5	0·05	0·12	0·08	0·07	0·17
" 3. Suicide	58	12	70	1·53	0·45	1·09	0·99	1·17
" 4. Execution	...	...	...	...	...	...	...	0·01
Total Class VII.	467	121	588	12·36	4·56	9·14	8·32	8·62
Class VIII. Ill-defined and not-specified causes	164	99	263	4·34	3·73	4·09	3·72	3·42
Grand totals	3,776	2,656	6,432	100·00	100·00	100·00	91·00	99·12

The following table exhibits the number of deaths in 1896 from each specific disease :—

CAUSES OF DEATH.

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
I.—Specific Febrile or Zymotic Diseases.	**Order 1.—*Miasmatic.***			
	Small-pox	...	...	...
	Chicken-pox	...	...	...
	Measles	1	...	1
	Epidemic rose-rash, rubeola	...	...	...
	Scarlet fever, scarlatina	2	2	4
	Typhus	...	...	...
	Dengue	...	...	...
	Relapsing fever	...	...	...
	Influenza	41	48	89
	Whooping-cough	11	13	24
	Mumps	...	...	...
	Diphtheria	29	45	74
	Cerebro-spinal fever	...	...	...
	Simple and ill-defined fever	...	1	1
	Enteric fever, typhoid	70	54	124
	Other miasmatic diseases	...	...	...
	Total Order 1	154	163	317
	Order 2.—*Diarrhœal.*			
	Simple cholera	13	9	22
	Diarrhœa	157	142	299
	Dysentery	6	7	13
	Total Order 2	176	158	334
	Order 3.—*Malarial.*			
	Remittent fever	...	...	...
	Ague	1	...	1
	Beriberi	1	...	1
	Total Order 3	2	...	2
	Order 4.—*Zoogenous.*			
	Hydrophobia	...	...	...
	Glanders	...	...	...
	Splenic fever	...	...	...
	Cow-pox and other effects of vaccination	...	...	...
	Total Order 4	...	...	...
	Order 5.—*Venereal.*			
	Syphilis	12	6	18
	Gonorrhœa, stricture of urethra, ulcer of groin	8	...	8
	Total Order 5	20	6	26
	Order 6.—*Septic.*			
	Phagedæna	...	...	...
	Erysipelas	7	6	13
	Pyæmia, septicæmia	15	7	22
	Puerperal fever, pyæmia, septicæmia	...	10	10
	Total Order 6	22	23	45
	Total Class I.	374	350	724
II.—Parasitic Diseases.	Thrush	1	1	2
	Other diseases from vegetable parasites	...	...	...
	Hydatid disease	2	5	7
	Worms	3	5	8
	Other diseases from animal parasites	...	...	...
	Total Class II.	6	11	17
III.—Dietetic Diseases.	Starvation	1	...	1
	Want of breast-milk	10	4	14
	Scurvy	1	...	1
	Intemperance—			
	Chronic alcoholism	27	3	30
	Delirium tremens	2	1	3
	Other dietetic diseases	5	7	12
	Total Class III.	46	15	61
IV.—Constitutional Diseases.	Rheumatic fever	19	16	35
	Rheumatism	9	10	19
	Gout	8	1	9
	Rickets	2	2	4
	Cancer	205	184	389
	Tabes mesenterica, tubercular peritonitis	22	25	47
	Tubercular meningitis, acute hydrocephalus	27	31	58
	Phthisis	279	244	523
	Other forms of tuberculosis, scrofula	31	21	52
	Purpura, hæmorrhagic diathesis	3	5	8
	Anæmia, chlorosis, leucocythæmia	12	15	27
	Diabetes mellitus	15	15	30
	Other constitutional diseases	3	2	5
	Total Class IV.	635	571	1,206
V.—Developmental Diseases.	Premature birth	122	108	230
	Atelectasis	3	3	6
	Cyanosis	6	3	9
	Spina bifida	4	1	5
	Imperforate anus	2	2	4
	Cleft palate, hare-lip	2	...	2
	Other congenital defects	14	6	20
	Old age	134	102	236
	Total Class V.	287	225	512
VI.—Local Diseases	**Order 1.—*Diseases of Nervous System.***			
	Inflammation of the brain or its membranes	60	47	107
	Cerebro-spinal meningitis	4	1	5
	Apoplexy	83	81	164
	Softening of brain	18	8	26
	Hemiplegia, brain paralysis	18	9	27

CAUSES OF DEATH—*continued.*

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 1.—*Diseases of Nervous System*—contd.			
	Paralysis (undescribed)...	44	33	77
	Paralysis agitans ...	...	...	...
	Insanity, general paralysis of insane	38	14	52
	Chorea	...	...	...
	Epilepsy	18	9	27
	Convulsions	73	72	145
	Laryngismus stridulus ...	2	3	5
	Idiopathic tetanus ...	4	6	10
	Paraplegia, diseases of spinal cord	13	13	26
	Locomotor ataxia ...	10	...	10
	Other diseases of nervous system	42	22	64
	Total Order 1 ...	427	318	745
	ORDER 2.—*Diseases of Organs of Special Sense.*			
	Otitis, otorrhœa... ...	3	3	6
	Epistaxis, and diseases of nose	1	...	1
	Ophthalmia, and diseases of eye	...	...	...
	Total Order 2 ...	4	3	7
	ORDER 3.—*Diseases of Circulatory System.*			
	Endocarditis, valvular disease	203	156	359
	Pericarditis	10	2	12
	Hypertrophy of heart ...	8	2	10
	Fatty degeneration of heart	30	22	52
	Angina pectoris... ...	18	10	28
	Syncope	74	49	123
	Aneurism	27	5	32
	Senile gangrene... ...	10	1	11
	Embolism, thrombosis ...	2	7	9
	Phlebitis	1	2	3
	Varicose veins, piles ...	...	1	1
	Other diseases of circulatory system	8	4	12
	Total Order 3 ...	391	261	652
	ORDER 4.—*Diseases of Respiratory System.*			
	Laryngitis	9	8	17
	Croup	31	19	50
	Other diseases of larynx and trachea	...	...	...
	Asthma, emphysema ...	18	6	24
	Bronchitis	137	86	223
	Pneumonia	184	101	285
	Pleurisy	14	15	29
	Other diseases of respiratory system	34	26	60
	Total Order 4 ...	427	261	688
VI.—LOCAL DISEASES—*continued.*	ORDER 5.—*Diseases of Digestive System.*			
	Stomatitis, cancrum oris	5	2	7
	Dentition	33	31	64
	Sore throat, quinsy ...	6	1	7
	Dyspepsia	4	2	6
	Hæmatemesis	2	1	3
	Melæna	3	1	4
	Diseases of stomach, gastritis	43	36	79
	Enteritis	79	55	134
	Ulceration, perforation, of intestine	11	8	19
	Ileus, obstruction of intestine	24	18	42
	Stricture or strangulation of intestine	4	3	7
	Intussusception of intestine	7	1	8
	Hernia	8	6	14
	Fistula	...	...	...
	Peritonitis	32	26	58
	Ascites	1	1	2
	Gall-stones	1	1	2
	Cirrhosis of liver ...	35	13	48
	Other diseases of liver, hepatitis, jaundice ..	31	30	61
	Other diseases of digestive system	14	8	22
	Total Order 5 ...	343	244	587
	ORDER 6.—*Diseases of Lymphatic System and Ductless Glands.*			
	Diseases of lymphatic system	2	...	2
	Diseases of spleen ...	2	1	3
	Bronchocele	1	4	5
	Addison's disease ...	2	2	4
	Total Order 6 ...	7	7	14
	ORDER 7.—*Diseases of Urinary System.*			
	Acute nephritis	15	6	21
	Bright's disease ...	75	31	106
	Uræmia	9	6	15
	Suppression of urine ...	1	1	2
	Calculus	5	1	6
	Hæmaturia	1	...	1
	Diseases of bladder and prostate	41	3	44
	Other diseases of urinary system (kidney diseases undescribed)	21	3	24
	Total Order 7 ...	168	51	219
	ORDER 8.—*Diseases of Reproductive System.*			
	(*a.*) Diseases of organs of generation,—			
	Ovarian disease ...	...	8	8

CAUSES OF DEATH—*continued.*

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 8.—*Diseases of Reproductive System—ctd.*			
	(*a.*) Diseases of organs of generation—*ctd.*			
	Diseases of uterus and vagina	...	12	12
	Disorders of menstruation	...	...	...
	Pelvic abscess	1	3	4
	Perineal abscess ...	...	...	...
	Diseases of testes, penis, scrotum, &c.	...	...	...
	(*b.*) Diseases of parturition,—			
	Abortion, miscarriage ...	...	13	13
	Puerperal mania ...	...	...	...
	Puerperal metritis ...	...	...	...
	Puerperal convulsions ...	...	14	14
	Placenta prævia (flooding)	...	20	20
	Phlegmasia dolens ...	...	...	...
	Other accidents of childbirth	...	30	30
	Total Order 8 ...	1	100	101
	ORDER 9.—*Diseases of Organs of Locomotion.*			
	Caries, necrosis	6	5	11
	Arthritis, ostitis ...	4	...	4
	Other diseases of organs of locomotion	5	5	10
	Total Order 9 ...	15	10	25
	ORDER 10.—*Diseases of Integumentary System.*			
	Carbuncle	6	...	6
	Phlegmon, cellulitis ...	1	...	1
	Lupus	1	1	2
	Ulcer, bed-sore	2	1	3
	Eczema	3	5	8
	Pemphigus	1	1	2
	Other diseases of integumentary system ...	...	1	1
	Total Order 10 ...	14	9	23
	Total Class VI. ...	1,797	1,264	3,061

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VII.—VIOLENCE.	ORDER 1.—*Accident or Negligence.*			
	Fractures, contusions ...	222	19	241
	Gunshot wounds ...	11	...	11
	Cut, stab	8	...	8
	Burn, scald	21	35	56
	Sunstroke	3	1	4
	Poison	6	3	9
	Drowning	114	31	145
	Suffocation	16	5	21
	Otherwise	6	12	18
	Total Order 1 ...	407	106	513
	ORDER 2.—*Homicide.*			
	Murder, manslaughter ...	2	3	5
	Wounds in battle ...	...	...	...
	Total Order 2 ...	2	3	5
	ORDER 3.—*Suicide.*			
	Gunshot wounds ...	17	1	18
	Cut, stab	11	1	12
	Poison	15	5	20
	Drowning	2	3	5
	Hanging	13	2	15
	Otherwise	...	...	...
	Total Order 3 ...	58	12	70
	ORDER 4.—*Execution.*			
	Hanging	...	...	...
	Total Class VII. ...	467	121	588
VIII.—ILL-DEFINED AND NOT-SPECIFIED CAUSES.	Dropsy	3	1	4
	Marasmus, &c.	130	95	225
	Mortification, gangrene ...	2	1	3
	Tumour	1	...	1
	Abscess	2	...	2
	Hæmorrhage	1	...	1
	Sudden (cause unascertained)	10	2	12
	Other ill-defined and not-specified causes ...	15	...	15
	Total Class VIII. ...	164	99	263
	General totals ...	3,776	2,656	6,432

The deaths in 1896 from specific febrile or zymotic diseases amounted to 724, a proportion of 10·24 in every 10,000 persons living, and a decrease of 54 on the number of deaths in 1895 from the same causes.

The following are the diseases in this class that have caused the greatest mortality during the past ten years:—

Diseases.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Measles	28	5	2	1	1	..	525*	14	..	1
Scarlet fever and scarlatina	18	21	19	31	24	4	1	5		4
Diphtheria ..	92	143	113	116	86	195	128	92	76	74
Whooping-cough ..	138	72	19	82	242	115	55	190	150	24
Influenza	9	9	9	70	210	144	106	233	125	89
Diarrhœal diseases	475	214	355	290	319	329	193	207	232	334
Enteric or typhoid fever	158	130	118	145	119	134	97	115	94	124
Puerperal fever ..	24	39	25	19	27	29	24	38	32	10

From smallpox there were no deaths. By means of further expenditure in remunerating vaccination inspectors, the number of vaccinations registered has been raised from 8,523 in 1895, to 11,917 in 1896. Many of the inspectors received no special payment on account of their work in regard to vaccinations until last year, and, considering the nature of the duties, the Government deemed it desirable to offer some inducement that would lead to fuller results. as the work was thankless. Inspectors who are salaried officers of Government now receive 1s. for each case of successful vaccination of children under fourteen years registered, and Inspectors not being Government officers receive 1s. 6d. per case for the same service. The number of children under one year of age successfully vaccinated, and the proportion to the total number of births, are given for 1896 and the nine preceding years:—

——	Total Vaccinations registered.	Number of Births registered.	Proportion of Successful Vaccinations of Children under 1 Year of Age to Total Births. Per Cent.	Proportion of Successful Vaccinations of Children under 14 Years of Age to Total Births. Per Cent.
Totals, 1896	.. 11,917	18,612	30·78	64·03
„ 1895	.. 8,523	18,546	31·72	44·34
„ 1894	.. 9,322	18,528	32·42	50·31
„ 1893	.. 7,412	18,187	28·09	40·75
„ 1892	.. 8,216	17,876	32·41	45·96
„ 1891	.. 9,284	18,273	38·81	50·81
„ 1890	.. 9,357	18,278	42·66	51·19
„ 1889	.. 11,913	18,457	48·37	64·55
„ 1888	.. 12,782	18,902	51·10	67·62
„ 1887	.. 12,919	19,135	53·79	67·52

The figures for last year show better than those for the previous year, 1895, as regards the vaccinating of unvaccinated children of various ages, but the proportion of children under one year of age who were successfully vaccinated to the total births is even less for 1896 than for 1895, and goes to prove that only one child in every three born is successfully vaccinated, a serious matter when the possibility of an epidemic of smallpox is taken into consideration.

* Including rubeola, 14.

In England, after three years practical immunity from smallpox, the deaths rose in 1892 to 431, or 15 per million persons living. In 1893 there was a further rise to 1,457, or a rate of 49 per million living; but in 1894 the rate fell to 820, or 27 per million, and in 1895 to 233, or 7 per million. The Registrar-General remarks that "of the 223 persons whose deaths were recorded in 1895 only 33, or 15 per cent., were described as having been vaccinated; 61, or 27 per cent., were returned as not vaccinated; and with respect to the remaining 58 per cent. no statement as to vaccination appeared in the certificates. In addition to the above, 86 deaths were attributed to chicken-pox, and 56 deaths to 'effects of vaccination.' Thus, in the year 1895 the total number of deaths either certainly or possibly caused by variola, and of deaths alleged to have been caused by the means taken to prevent that disease, was 365, or 12 per million persons living." A system, described as "moderate compulsion," has been recommended in England, under which persons who had been fined £1, or had been fined in two penalties of any amount, for neglecting to have their children vaccinated would be exempted from any further proceedings.

Measles, which was epidemic in 1893, caused only 14 deaths in 1894, none in 1895, and only 1 in 1896. Scarlatina was fatal in five cases. The mortality from diphtheria, whooping-cough, and influenza fell during 1896, but from diarrhœal diseases the deaths increased from 232 to 334. The deaths from influenza, though only 89 against 125 in 1895, and 233 in 1894, show this disease to be contributing largely to the mortality. Deaths from typhoid fever increased from 94 in 1895 to 124 in 1896.

The proportions for the several Australasian Colonies for the years 1887–92 were :—

DEATHS FROM TYPHOID FEVER, 1887-92, PER 10,000 PERSONS LIVING.

	1887.	1888.	1889.	1890.	1891.	1892.
Queensland ..	7·07	6·31	10·28	3·40	3·11	3·05
New South Wales ..	4·32	4·26	5·35	2·82	2·35	2·81
Victoria ..	6·21	5·13	8·35	5·46	3·10	2·59
South Australia ..	4·92	3·84	4·37	3·13	2·52	2·70
Western Australia ..	3·12	1·65	1·16	0·42	2·34	9·83
Tasmania ..	8·37	6·12	8·06	3·41	5·57	3·01
New Zealand ..	2·82	2·30	1·98	2·40	1·89	2·20

There were 17 deaths from parasitic diseases, the proportion per 10,000 living being 0·24. Two men and five women died from hydatids.

The deaths from constitutional diseases in 1896 numbered 1,206, or 17·06 per 10,000 of population. The most fatal diseases in this class were phthisis and cancer.

From phthisis there are more deaths than from any other cause. The number of deaths was 523 in 1896, against 553 in 1895. The deaths in 1896 were in the proportion of 7·40 in every 10,000 persons living, against 7·99 in the previous year.

Figures for ten years are quoted, showing that the total number

of deaths from this disease is actually less than in 1887, and that the rate, though fluctuating, may be considered as having rather diminished than increased with time:—

Year.	Deaths from Phthisis.	Rate per 10,000.
1887	534	8·95
1888	476	7·86
1889	499	8·16
1890	520	8·38
1891	495	7·86
1892	524	8·16
1893	545	8·24
1894	576	8·48
1895	553	7·99
1896	523	7·40

The death-rate from phthisis in New Zealand is the lowest for the Australasian Colonies, as will be seen from the figures quoted below:—

DEATH-RATES FROM PHTHISIS PER 10,000 PERSONS LIVING.

	1890.	1891.	1892.
Queensland	13·35	12·38	10·17
New South Wales ..	9·34	9·21	8·62
Victoria	14·58	12·93	13·60
South Australia ..	9·29	10·36	9·41
Western Australia ..	8·97	9·56	8·40
Tasmania	9·60	9·00	8·44
New Zealand ..	8·38	7·86	8·16

In all the Australasian Colonies the rate is materially increased by the deaths of persons who have come out either already suffering from phthisis or predisposed thereto. There is no reason for believing that this circumstance has more effect on the death-rate in Australia than in New Zealand; so that the lower rate obtaining in this colony may be taken as proof of the superiority of its climate for withstanding consumptive tendencies.

The death-rate of England and Wales from phthisis is far higher than that of New Zealand. In 1894 it stood at 13·85 per 10,000. The Registrar-General of England remarks in his report that "up to the year 1888 the mortality from phthisis had shown a steady decline for many years, but in 1889, 1890, and 1891 it rose somewhat. In 1892 and 1893, however, the rate fell again to 1,468 in a million, and again in 1894 to 1,385 per million, which is the lowest rate on record." In 1895 the rate was 1,398 per million.

Phthisis is now known to be and is treated as an infectious preventible disease caused by the bacillus tuberculosis, which is communicable in many ways. Certain constitutions are far more predisposed than others to receive this bacillus, especially under conditions of life unfavourable to robust health, when a nidus is formed for the development of the bacillus.

Legislative action has been recommended to safeguard the life and health of the people from tubercle; and the complete isolation of consumptive patients, with the disinfecting of their sputa, and of

everything that has been in contact with them, is suggested from time to time as a necessary measure.

From other forms of tuberculosis the deaths in 1896 were 157, or 2·22 per 10,000 of population.

The deaths from cancer during the year 1896 were 389. There were more deaths of males than of females, the numbers being males, 205, females, 184. The rate of mortality per 10,000 living was 5·50. The apparent increase in deaths from this disease is shown below and compared with that of England. But the increase is not believed to be an actual fact, at least to the extent represented, but partly—or, according to some opinions, wholly—the result of more careful certification of the causes of death and of improved diagnosis, in cases of what is termed inaccessible cancer.

It is certain, however, that out of a total of 6,432 deaths from all causes in New Zealand during 1896, 389, or 6 per cent., were caused by cancer.

DEATHS FROM CANCER IN EVERY 10,000 PERSONS LIVING.

Year.	New Zealand.	England.
1881	2·69	5·20
1886	3·68	5·90
1891	4·68	6·92
1896	5·50	7·55 (1895)

The following table gives the death-rates from cancer in New Zealand of males and females for the past twelve years :—

DEATHS FROM CANCER IN EVERY 10,000 PERSONS OF EACH SEX LIVING IN NEW ZEALAND.

Year.	Males.	Females.	Year.	Males.	Females.
1885	2·82	3·43	1891	4·61	4·77
1886	3·69	3·67	1892	5·08	4·44
1887	3·96	4·03	1893	5·35	4·65
1888	4·19	4·53	1894	6·65	5·27
1889.	3·47	4·06	1895	5·67	5·37
1890	4·72	4·79	1896	5·49	5·51

Deaths from diabetes mellitus fell from 46 in 1895 to 30 in 1896. In 1894 there were 49 deaths from this cause, the highest number that has been recorded.

The total of deaths from developmental diseases was 512, or 7·25 per 10,000 persons living. The mortality from premature birth comprised 230 deaths, and that from other congenital defects 46 deaths. The proportion of deaths from premature birth varies from 9 to 12 out of every 1,000 births, and that from congenital defects from 2 to 4 per 1,000 births. Particulars for five years exhibit the annual rates :—

NUMBER AND PROPORTIONS PER 1,000 BIRTHS.

Year.	Deaths from Premature Birth. No.	Deaths from Premature Birth. Proportion per 1,000.	Deaths from Congenital Defects. No.	Deaths from Congenital Defects. Proportion per 1,000.
1892	201	11·24	.. 57	3·19
1893	228	12·54	.. 69	3·79
1894	214	11·55	.. 74	3·99
1895	183	9·87	.. 78	4·21
1896	230	12·36	.. 46	2·47

Stating the result in another way, there was one death from premature birth to every 81 births in 1896, and one death from congenital defect to every 404 births. In England the proportion of deaths from premature birth to every 1,000 births was as high as 18·98 in the year 1895.

Deaths from old age in 1896 numbered 236, against 232 in 1895.

Deaths by diseases of the nervous system were 745, or 11·58 out of every 100 deaths from all causes, and 10·54 out of every 10,000 persons living. Of the 745 deaths, 164 were credited to apoplexy, 145 to convulsions, and 112 to inflammation of the brain and its membranes. Paralysis, including hemiplegia, paralysis of the insane, and paraplegia, caused 182 deaths, and locomotor ataxia 10 deaths. A comparison of the deaths from nervous diseases (excluding convulsions of children) for the last five years does not give any reason for supposing that these complaints are on the increase.

Year.	Deaths from Nervous Diseases (excluding Convulsions of Children). No.	Proportion per 10,000 Persons living.
1892	556 ..	8·66
1893	601 ..	9·09
1894	524 ..	7·72
1895	597 ..	8·62
1896	600 ..	8·48

Diseases of the circulatory system resulted in 652 deaths, being 10·14 out of every 100 from all causes, and 9·23 per 10,000 persons living. Of the total number in this order, endocarditis, valvular disease of heart, contributed 359 deaths, and other forms of heart disease 74. From angina pectoris there were 28 deaths, syncope 123, and aneurism 32.

Diseases of the respiratory system show 688 deaths, of which 508 were attributable to bronchitis and pneumonia. Taken together, these two complaints were the cause of nearly as many deaths as phthisis, and adding 29 from pleurisy, 50 from croup, 17 from laryngitis, and 84 from other respiratory diseases, the mortality in the order is found to be 10·70 per cent. of the total deaths, and 9·72 per 10,000 of the population.

Deaths from diseases of the digestive system also formed a large proportion of the whole (9·12 per cent.), the number being 587. Enteritis was most fatal, showing 134 deaths, and gastritis 79, liver diseases coming next with 109 deaths.

Of 219 deaths from diseases of the urinary system in 1896, the deaths from Bright's disease of the kidneys (albuminuria) numbered 106. In the year 1891, with a smaller population, the mortality was 102 deaths; but for the years 1885–86–87 the deaths were only 53, 57, and 46 respectively.

Deaths by violence form a large item in the total mortality. In 1896 the proportion per 10,000 of persons living was 8·32, the total number of deaths having been 588.

Of 467 males who died violent deaths, 58 were suicides. The

deaths of females by violence were far fewer than those of males, amounting to no more than 121, and out of these only 12 committed suicide. The table on page 131 gives the full list of deaths from external or violent causes for the year 1896.

Accidental deaths numbered 513, males 407 and females 106. Of the total male deaths, 222 resulted from fractures or contusions, and 114 from drowning. Of the female deaths, 31 were due to drowning.

The following figures, taken from the Victorian Year-book of 1894, show the death-rate from violence in the Australasian Colonies and the United Kingdom, from which it would appear that the rate in New Zealand is higher than in the Home-country, South Australia, Victoria, and Tasmania, but lower than in New South Wales, Queensland, and Western Australia :—

Colonies or Countries.	Proportion of Deaths by Violence per 100,000 living.
Queensland	163·8
Western Australia	161·7
New South Wales	111·7
New Zealand	95·7
Victoria	94·6
United Kingdom	77·5
Tasmania	74·5
South Australia	74·2

At the time of the census, April, 1896, there were in the colony 411 medical men in practice, against 362 returned in 1891. (The number of medical practitioners registered in the colony is 651, including 79 whose addresses are not known and 113 who have left New Zealand.) Medical students numbered 48. There were 82 persons who are grouped in the detailed tables of the census as irregular medical practitioners, including, among others, 5 Chinese doctors, 31 herbalists and 11 assistants, and 11 medical galvanists.

Hospitals, Lunatic Asylums, Benevolent Asylums, and Charitable Institutions.

Hospitals.

Prior to the abolition of provinces the hospitals of the colony were supported mainly out of provincial revenues. After that event the expenditure for hospitals was for the most part charged against the revenue of counties and municipal corporations, until October, 1885, when "The Hospitals and Charitable Institutions Act, 1885," came into force.

The portion of the colony included within the three principal islands—the North, Middle, and Stewart Islands—was by the above Act divided into twenty-eight hospital districts, each consisting of one or more counties with the interior boroughs, to be presided over by elective Boards, designated "Hospital and Charitable Aid Boards."

The revenues of these Boards accrue from the following sources :—

(1.) Rents and profits of land and endowments vested in the Board, or set apart for the benefit of particular institutions;
(2.) Voluntary contributions;
(3.) Grants from contributory local authorities; and
(4.) Subsidies from the Consolidated Fund (these being at the rate of 10s. for every £1 of bequests, but in no case exceeding £500 in respect of any one bequest; £1 4s. for every £1 of voluntary contributions; and £1 for every £1 received from any local authority).

The contributory local authorities (being the County and Borough Councils, and Boards of road and town districts where the Counties Act is not in force) are empowered by the Act to raise by special rates the amounts assessed by the Hospital District Boards as their proportionate contributions to the Hospital and Charitable-aid Fund.

The District Boards undertake the general management and control of those hospitals that are not incorporated in terms of the Act, and are required to contribute to the support of the incorporated hospitals. To be incorporated a hospital must have as many as 100 subscribers, contributing not less than £100 annually by amounts of not less than 5s., and must have been declared by the Governor in Council, after receipt by him of a duly signed petition, to be a body politic and corporate, under the government of trustees.

There are 40 hospitals in the colony, of which 21 are incorporated institutions, while 19 are directly managed and controlled by District Boards. In 1896 these hospitals afforded accommodation for 1,061 male and 490 female patients, a total of 1,551. The number of cubic feet of space included within the walls of all the sleeping-wards was 2,112,567, which gave an average of 1,362 cubic feet to each bed. 6,415 males and 3,371 females were admitted as patients during the year 1896, and 675 male and 252 female patients were inmates at the end of the year. The total number of indoor patients during the year was 10,660—viz., 7,072 males and 3,588 females.

Outdoor relief was also given to a very large number of persons; but, as in some of the hospitals no records are kept of the outdoor patients, it is impossible to state the number of distinct persons who received such relief.

Benevolent Asylums and Charitable Institutions.

The various benevolent asylums and charitable institutions are placed on a similar footing to the hospitals. Most of the Boards of hospital districts are also Charitable-aid Boards; but, for the purpose of distributing charitable aid only, some of the hospital districts have been united into larger districts, so that, although there are 30 Boards for hospital purposes, there are only 23 for charitable-aid purposes.

Returns were received in 1896 from 16 benevolent asylums (not including orphanages), established for the support of indigent persons. The number of inmates in these institutions at the end of 1896 was 1,050, of whom 633 were males and 417 females. Outdoor relief was given by four of these institutions to 3,377 persons, including 1,747 children.

Auckland Sailors' Home.

There is a Sailors' Home at Auckland for the use of seafaring men resident in or visiting the town. The late Edmund Costley having left a large sum for charitable purposes, it was resolved to employ the bequest in building and endowing an institution where sailors might be received without distinction of race or religious belief, and board, lodging, and refreshments provided for them, together with such instruction and amusements as might tend to promote their social comfort and general welfare.

The Home, built in 1887, has room for 35 inmates, who are charged 15s. a week for board and lodging. It is managed by a council of eight members elected by the subscribers to the institution, with the Primate of New Zealand (the Right Rev. W. G. Cowie), who first originated the scheme, as Life President.

Orphan Asylums.

There were in 1896 four orphan asylums in the colony, one maintained by a District Hospital Board, one by the Church of England authorities, and two by clergy of the Roman Catholic Church; three of them receiving, at the charge of the State, orphan, destitute, and other children committed to them by a Stipendiary Magistrate.

Exclusive of the children so committed, 27 male and 21 female orphans were received during the year 1896, and 68 male and 88 female orphans remained as inmates at the end of the year.

Orphanages receiving committed children are, for that purpose, constituted "industrial schools."

Lunatic Asylums.

There are seven public lunatic asylums in the colony, maintained wholly or in part out of the public revenue. There is also one private asylum, licensed by the Governor for the reception of lunatics. There were, at the end of 1896, 1,390 male and 925 female patients belonging to these asylums. Of these, 1,295 males and 855 females were regarded as incurable, 12 males and 23 females were out on trial, and 83 males and 47 females were supposed to be curable. 144 male and 98 female patients were discharged during the year.

The following shows the proportion of insane—or, rather, of inmates of lunatic asylums—to the population (exclusive in each case of Maoris) at the end of the years stated:—

1884,	1	insane person	to every	393 of population.
1885,	"	"	382	"
1886,	"	"	370	"
1887,	"	"	360	"
1888,	"	"	365	"
1889,	"	"	349	"
1890,	"	"	348	"
1891,	"	"	343	"
1892,	"	"	339	"
1893,	"	"	330	"
1894,	"	"	316	"
1895,	"	"	351	"
1896,	"	"	308	"

It must not be overlooked that the proportions are increased by the admission into the asylums of inebriates, idiots, and others, who should not properly be there.

The Inspector of Hospitals and Asylums, in his report for the year 1896, specifies the causes of insanity in 466 cases (males, 296; females, 170) admitted during the year. In 51 of these (25 males, 26 females) the cause is given as "congenital or hereditary," and in 47 (males, 42; females, 5) as "drink." The proportion of cases due to drink to the total number of specified cases was therefore 10·09 per cent.

Sickness and Infirmity.

An instruction was given in the census household schedule that in regard to all persons "unable to follow their usual occupation," by reason of sickness or accident, the fact was to be stated when the form was being filled up. And by means of the information thus obtained the proportion of persons incapacitated from work on the day of the census has been ascertained, and is shown in the tables according to age-periods.

Besides persons suffering from sickness or accident, those afflicted with certain infirmities were also distinguished. These include the "deaf-and-dumb," "blind," "lunatics," "idiots," "epileptics," "paralytic," "crippled and deformed," "debilitated and infirm.'

The results of the investigation show that 9·94, or close upon 10 persons in every 1,000, were suffering from sickness or accident on the 12th April, 1896, using the word sickness to mean inability to work on that day; and that, besides these, there were 7·89, or nearly 8 persons in every 1,000, who were either affected with blindness, or deaf-and-dumb, lunatic, idiot, epileptic, &c.

These figures admit of being compared with the results obtained in New South Wales in 1891:—

Sickness, Accident, and Infirmity.—Proportions for 1,000 Living.

	New Zealand.	New South Wales.
Persons	17·83	19·79
Males	20·92	22·90
Females	14·36	16·13

The difference shows in favour of this colony in case of males as well as females.

The sickness and infirmity of the males is found to be higher than that of the females in each colony, and the degree of variation is practically the same in each: New Zealand showing 20 males per 1,000 living of that sex against 14 females per 1,000, and New South Wales 22 males per 1,000 against 16 females out of a similar number of females.

The numbers and proportions of males and females suffering from sickness, accident, or specified infirmity in this colony, according to age-periods, will be found tabulated in the Report on the Census. In regard to males, after the period 35–40 the proportion of sickness rises steadily at each quinquennium of age; while under accident the proportion is highest at the period of 65–70 years. The rate of sickness per 1,000 males living at 35–40 years was 5·46, and this increased to 19·08 at 55–60, to 43·66 at 65–70, and to 77·39 at 80 and upwards. In regard to females, the sickness is not so great at 30–35 years as at 25–30, but from 35–40 it increases, and from 55–60 very rapidly, though the numbers on which the proportions are based are admittedly small from this point onwards. The rates per 1,000 were 9·24 at 35–40 years, 15·59 at 55–60, and 75·09 at 80 years and upwards.

Females are proved to be very much less liable to accident than males, the proportions being 0·42 per 1,000 of females, and 2·39 per 1,000 of males; or better stated for this purpose, 4·16 per 10,000 females and 23·89 per 10,000 males. As with sickness, the proportions increase with advancing age: for instance, among males, 2·68 per 1,000 were suffering from accident at the group 20–25 years, 3·40 per 1,000 at 40–45, and 8·98 at the period 65–70 years. Among females the highest proportion per 1,000 is found at 70–75 years, being a rate of 1·81, or 18·14 per 10,000 living.

Sickness and infirmity can be compared for New Zealand, in respect of persons over 15 years of age, with the results of the census of 1891 and previously. The proportions are:—

PROPORTIONS PER 1,000 PERSONS OVER 15 YEARS.

	Sickness and Accident.	Specified Infirmities.	Total Sickness and Infirmity.
Census 1874	12·64	5·32	17·96
" 1878	11·16	5·70	16·86
" 1881	11·20	7·22	18·42
" 1886	12·61	7·82	20·43
" 1891	12·78	11·08	23·86
" 1896	14·28	11·41	25·69

Specified Infirmities.

The total of these under the various heads amounted to 5,560 of both sexes and all ages. The males were 3,608, and the females 1,952, the proportions for every 10,000 persons being 78·89: for males 97·00, and for females 58·64 per 10,000 of each sex respectively. These infirmities are specially treated of one by one in the succeeding paragraphs.

Deaf and Dumb.

There were 202 persons—111 males and 91 females—returned as deaf and dumb, or dumb only: of these 47 were inmates of the Sumner Institution, leaving 155 deaf-mutes who were living at home or in some other private residence. The total shows a proportion of 2·86 persons per 10,000 living, against 2·65 ascertained in 1891. The proportions of the deaf and dumb taken according to the sexes did not differ much. The figures are given for six census years.

DEAF AND DUMB (IN SEXES).—PROPORTIONS PER 10,000 OF POPULATION.

	Males.	Females.		Males.	Females.
Census 1874 ..	2·05	1·71	Census 1886 ..	2·37	2·22
„ 1878 ..	2·25	2·18	„ 1891 ..	2·80	2·49
„ 1881 ..	2·23	2·45	„ 1896 ..	2·99	2·71

The numbers at the census of 1896 for quinquennial age-periods are:—

NUMBERS OF THE DEAF AND DUMB AT LAST CENSUS.

	M.	F.		M.	F.
All ages	111	91	40 years to 45 years ..	5	1
	—	—	45 „ 50 „ ..	3	2
Under 5 years	1	2	50 „ 55 „ ..	3	4
5 years to 10 years ..	25	10	55 „ 60 „ ..	2	..
10 „ 15 „ ..	23	23	60 „ 65 „ ..	..	..
15 „ 20 „ ..	16	15	65 „ 70 „ ..	..	..
20 „ 25 „ ..	13	9	70 „ 75 „ ..	..	1
25 „ 30 „ ..	8	10	75 „ 80 „ ..	..	..
30 „ 35 „ ..	8	9	80 „ and upwards ..	..	..
35 „ 40 „ ..	4	4	Unspecified	..	1

The highest numbers are shown at the ages 5 to 10 and 10 to 15.

The occupations of the deaf and dumb were returned in 1896 as under:—

OCCUPATIONS OF THE DEAF AND DUMB.

	Persons.	M. Under 20.	M. Over 20.	F. Under 20.	F. Over 20.
Domestic servant	2	..	1	..	1
Hairdresser ..	1	..	1	..	..
Saddler ..	2	..	2	..	..
Tanner ..	1	..	1	..	..
Cabinetmaker ..	1	..	1	..	..
Tailor	4	1	3	..	..
Dressmaker ..	3	..	..	..	3
Bootmaker ..	1	1	..	..	..
Brewer's assistant	1	..	1	..	..
Sawmiller ..	1	..	1	..	..
Carpenter, joiner	4	..	4	..	..
Slater.. ..	1	..	1	..	..
Labourer (undefined) ..	4	1	3	..	..
Farmer ..	2	..	2	..	..
Relative assisting farmer ..	11	1	10	..	..
Labourer (farm)	3	..	3	..	..
Threshing-machine assistant ..	2	..	2	..	..
Gold-miner (alluvial).. ..	2	..	2	..	..
Independent means	3	..	2	..	1
No occupation ..	3	..	1	..	2
Domestic duties	37	..	..	10	27
Governmt. scholar	4	3	..	1	..
Receiving tuition at home ..	2	1	..	1	..
Dependent relative	48	31	..	17	..
Inmate of lunatic asylum ..	4	..	..	..	4
Inmate of deaf and dumb institution ..	47	26	..	21	..
Occupation not stated ..	8	..	5	..	3
	202	65	46	50	41

In 1891 deaf-mutes were found to exist in the Australasian Colonies in the following proportions, with which is given the proportion for New Zealand in 1896:—

DEAF-MUTEISM IN AUSTRALASIAN COLONIES, 1891.

South Australia	.. had 1 deaf-mute to every	1,369	persons.
Queensland	" "	2,557	"
Tasmania	" "	2,716	"
New South Wales ..	" "	2,867	"
Victoria	" "	3,133	"
Western Australia ..	" "	4,526	"
New Zealand (1896) ..	" "	3,482	"

Blind.

There were 211 males and 133 females, making a total of 344 persons returned as blind, including 43 who were given in the schedules as "nearly" or "partly" blind. Of the above total number, 37 were inmates of the Jubilee Institute for the Blind at Auckland. It would thus appear that only one out of every nine persons in the colony who suffered from blindness had been received into the institution. The number of blind persons in 1891 was 274. The proportions in every 10,000 of population show a continuous rise at successive censuses, and that there is more blindness amongst males than females.

PROPORTIONS OF BLIND TO EVERY 10,000 PEOPLE.

	Persons.	Males.	Females.
1874	2·54	2·45	2·18
1878	2·56	2·42	2·73
1881	2·82	2·93	2·68
1886	3·22	3·65	2·70
1891	4·37	4·91	3·74
1896	4·90	5·69	4·01

The proportion of the blind per 10,000 persons living is: for England, about 8·79; for Ireland, 11·30; for Scotland, 6·95; for Germany, 7·93; for France, 8·37; and for Italy, 7·63. For the Australian Colonies the figures are: Victoria, 8·72; New South Wales, 6·59; Australian Continent, 7·38.

The number of the blind in quinquennial periods of age is stated for each sex. Of 211 males, 73 were under and 138 upwards of 50 years old. Of 133 females, 62 were under 50, and 71 over that age.

NUMBERS OF THE BLIND AT AGE-PERIODS.

	Persons.	M.	F.		Persons.	M.	F.
All ages	344	211	133	40 years to 45 years	7	3	4
				45 " 50 "	21	9	12
Under 5 years ..	8	4	4	50 " 55 "	28	22	6
5 years to 10 years	9	6	3	55 " 60 "	40	28	12
10 " 15 "	14	8	6	60 " 65 "	39	25	14
15 " 20 "	26	13	13	65 " 70 "	32	21	11
20 " 25 "	12	8	4	70 " 75 "	21	15	6
25 " 30 "	10	5	5	75 " 80 "	26	14	12
30 " 35 "	14	8	6	80 and upwards	23	13	10
35 " 40 "	14	9	5				

Of the total number of the blind, 344 persons, there were 55 in regard to whom no occupation was stated; 56 (females) were returned as engaged in domestic duties, 68 persons as inmates of hospital, asylum, or blind institute, 21 as dependent relatives, 22 as of no occupation, 19 as farming, 12 of independent means, and the rest (91) of various occupations in small numbers each. A complete statement is added, in regard to which it must be remarked that many of the occupations are evidently the past occupations of persons whom blindness has prevented from continuing to work at their usual calling.

OCCUPATIONS (PAST OR PRESENT) OF THE BLIND.

	Persons.	M.		F.	
		Under 20.	Over 20.	Under 20.	Over 20.
Barrister (not in practice)	1	..	1	..	..
Teacher of the blind	2	..	2	..	..
School-teacher (retired)	1	..	1	..	..
Teacher of music	2	..	2	..	..
Boarding-house keeper	2	..	2	..	..
Assistant, hotel	1	..	1	..	..
Capitalist	1	..	1	..	..
Landowner	1	..	..	..	1
Stationer's traveller	1	..	1	..	..
Dairyman	2	..	2	..	..
Grain merchant	1	..	1	..	..
Fruiterer	1	..	1	..	..
Grocer	1	..	1	..	..
Ironmonger	2	..	2	..	..
Shopkeeper, storekeeper	4	..	3	..	1
Hawker	1	..	1	..	..
Clerk	1	..	1	..	..
Mariner	1	..	1	..	..
Lumper	2	..	2	..	..
Message-boy	1	1	..	..	..
Basketmaker	4	..	4	..	..
Piano-tuner	2	..	2	..	..
Saddler	1	..	1	..	..
Tanner	1	..	1	..	..
Bootmaker, shoemaker	2	..	2	..	..
Milliner, dressmaker	1	..	..	..	1
Matmaker	1	..	1	..	..
Baker	2	..	2	..	..
Cordial-maker	1	..	1	..	..
Soap-maker	1	..	1	..	..
Road contractor	1	..	1	..	..
Sawyer	1	..	1	..	..
Carpenter	3	..	3	..	..
Plasterer's labourer	1	..	1	..	..
Labourer (undefined)	8	..	8	..	..
Gardener	4	..	4	..	..
Farmer	19	..	18	..	1
Relative assisting farmer	2	1	1	..	..
Farm labourer	3	..	3	..	..
Dairy-farmer	1	..	1	..	..
Sheep-farmer	1	..	1	..	..
Fisherman	1	..	1	..	..
Bushman	1	..	1	..	..
Miner, quartz	1	..	1	..	..
Miner, alluvial	1	..	1	..	..
Miner, undefined	1	..	1	..	..
Pensioner	2	..	2	..	..
Annuitant	1	..	1	..	..
Independent means	12	..	9	..	3
Settler	1	..	1	..	..
No occupation	22	..	13	..	9
Domestic duties	56	..	..	1	55
Governmt. scholar	3	2	..	1	..
Private school	2	..	..	1	1
Receiving tuition at home	2	2	..	..	..
Dependent relatives	21	15	..	6	..
Inmate of hospital	11	..	7	..	4
Inmate of benevolent asylum	16	..	13	..	3
Inmate of lunatic asylum	4	..	3	..	1
Inmate of blind institute	37	9	14	9	5
In receipt of charitable aid	5	..	2	..	3
Occupation not stated	55	1	27	8	19
	344	31	180	26	107

Blindness in the Australasian Colonies existed in 1891 in the following proportions, contrasted with which are the 1896 figures for New Zealand:—

BLINDNESS IN AUSTRALASIAN COLONIES, 1891.

Tasmania ..	.. had 1 blind person to every	889	persons.
Western Australia ..	"	922	"
Victoria	"	1,146	"
South Australia ..	"	1,297	"
New South Wales ..	"	1,517	"
Queensland	"	1,978	"
New Zealand (1896) ..	"	2,045	"

LUNACY.

The lunatics enumerated were 2,198 persons, 1,330 males and 868 females, nearly all of whom were inmates of the asylums for the insane in the colony. Departmental returns show 2,206 persons as the total number of inmates; but this number includes Maori patients.

Comparison with the results of previous censuses shows a continually increasing proportion of lunatics to the population in respect of either sex, and that there is considerably more lunacy among the men than women.

LUNATICS.—PROPORTIONS PER 10,000 OF POPULATION.

	Persons.	Males.	Females.
Census 1874	19·93	23·28	15·48
" 1878	20·85	25·07	15·54
" 1881	22·86	27·30	17·43
" 1886	26·50	31·03	21·18
" 1891	27·82	31·28	23·92
" 1896	31·13	35·70	26·02

The numbers of persons, males and females, who were lunatics, were highest at the period 50–55 years, as will be found by the further statement.

LUNATICS.—NUMBERS AT QUINQUENNIAL AGE-PERIODS.

Ages.	Persons.	M.	F.
All ages	2,198	1,330	868
Under 5 years	1	1	..
5 years to 10 years	3	..	3
10 " 15 "	12	4	8
15 " 20 "	42	24	18
20 " 25 "	76	51	25
25 " 30 "	144	83	61
30 " 35 "	184	109	75
35 " 40 "	251	140	111
40 " 45 "	271	167	104
45 " 50 "	263	152	111
50 " 55 "	303	189	114
55 " 60 "	255	156	99
60 " 65 "	180	117	63
65 " 70 "	115	82	33
70 " 75 "	46	28	18
75 " 80 "	27	14	13
80 years and upwards	14	7	7
Unspecified	11	6	5

The proportion of lunatics per 10,000 males living at the above age-periods was only 5·95 at 15–20 years, but had advanced to 62·21 at 35–40 years, to 109·46 at 55–60, and reached its maximum at the period 65–70, when the proportion was 126·96. In the case of females, the proportions rose to a maximum of 115·16 at 55–60.

In 1896 one person in every 320, exclusive of Maoris, in New Zealand was afflicted with lunacy. This proportion, though less than that found to obtain in Victoria in 1891, is greater than the proportions at that time for the other Australian Colonies.

LUNACY IN AUSTRALASIAN COLONIES, 1891.

Victoria	.. had 1 lunatic in every	302	persons.
New South Wales	"	359	"
South Australia	"	376	"
Tasmania	"	383	"
Western Australia	"	386	"
New Zealand (1896) ..	"	320	"

Stated in proportions to 10,000 persons living, the comparison for the Home Country and these colonies is :—

LUNACY (INCLUDING IDIOCY).

United Kingdom (1891)	35·52 per 10,000	persons.
England	32·58	"
Scotland	38·43	"
Ireland	45·04	"
Victoria	36·17	"
New South Wales	30·38	"
New Zealand (1896)	33·15	"
France	25·01	"
Sweden, Norway, and Denmark ..	20·59	"

IDIOCY.

The number of idiots of both sexes enumerated in the census was 144, against 128 in 1891; the proportion to 10,000 of population being 2·02 against 2·03 at the previous census. As with lunacy, the proportion of idiocy amongst the males (2·62 per 10,000) is far higher than amongst the females (1·36). In comparison with Australasian Colonies, excepting Western Australia, New Zealand has fewer idiots in proportion to the population than any of the other colonies.

IDIOCY IN THE AUSTRALASIAN COLONIES, 1891.

Tasmania	.. had 1 idiot in every	3,188	persons.
Victoria	"	3,212	"
South Australia	"	3,815	"
New South Wales	"	3,930	"
Western Australia	"	7,112	"
New Zealand (1896) ..	"	4,884	"

EPILEPSY.

The number of epileptics stated in the census was 320. However imperfect the return may be, any objection to giving information would probably be about the same in degree at one census as

at another, so that comparisons may be useful. The proportions per 10,000 living were :—

EPILEPSY PER 10,000 LIVING.

	Males.	Females.
Census, 1891	4·09	3·27
„ 1896	4·72	4·34

The numbers at successive census years increase as under, but it is very improbable that these in any way nearly represent the real facts :—

EPILEPTICS—NUMBERS AT SUCCESSIVE CENSUS YEARS.

	Persons.	Males.	Females.
Census, 1874	115	68	47
„ 1878	164	101	63
„ 1881	194	112	82
„ 1886	221	130	91
„ 1891	232	136	96
„ 1896	320	176	144

Epilepsy, like lunacy and idiocy, is less frequently found amongst females than males.

PARALYSIS.

Persons set down as paralytic increased from 468 in 1891 to 548 in 1896. The proportions are :—

PARALYTIC PER 10,000 LIVING.

	Males.	Females.
Census, 1891	9·27	5·45
„ 1896	9·30	6·06

The males again are represented as suffering most from this complaint.

CRIPPLED AND DEFORMED.

These numbered 1,225 persons, 959 males and 266 females. The numbers include persons who had lost a limb, and the comparison with the previous census shows a higher rate for 1896 than existed in 1891.

PROPORTIONS PER 10,000 LIVING OF CRIPPLED AND DEFORMED PERSONS.

	Persons.	Males.	Females.
Census, 1891	15·64	22·91	7·43
„ 1896	17·42	25·84	8·02

SECTION III.—THE MAORIS.

THE census of the Maori population—that is, full-blooded Maoris, with all half-castes living as members of a Native tribe—was taken under the supervision of the officers of the Justice Department in the latter part of February, 1896. The enumeration of the Natives cannot be effected for one particular night, as is done with Europeans, and the instruction given to Enumerators was that the work should be done in as short a period of time as possible, beginning in the third week of February, and leaving the remainder of that month, and the month of March, for the work of examining, correcting, and completing the returns.

The names of the Natives were given in the Sub-Enumerators' books, besides information as to sex, age, principal tribe, sub-tribe, or hapu to which belonging, and particulars as to extent of cultivations owned individually or communally, with live stock.

Enumerators for the Maori census were directed to report on the general state of health of the Natives, and any other matters of interest relating to them.

The Enumerators for the northernmost counties reported fairly good health among the Natives, but that a habit of camping in low swampy places during the gum-digging season was injurious. Digging for kauri-gum is their principal occupation throughout the country north of Auckland.

In the country over which the Maori "King," Mahutu, has influence, Sub-Enumerators experienced great difficulties, being told that the "King" had already taken a census, and no other was required. The Maoris also seemed to connect the census with taxation, and objected to it on those grounds.

The Sub-Enumerators for Waikato, Kawhia, and Thames Counties reported very little sickness. In Counties Tauranga, Whakatane, Rotorua, and Taupo (East and West) no unusual sickness was found.

The Natives round Tauranga are stated to be more industrious than formerly, and taking to agricultural pursuits.

In the Counties of Cook and Waiapu the Maoris were stated to be in very good health, and, as a rule, comfortably off; most of the young and middle-aged were working at bush-falling, shearing, &c., and making good wages.

For Counties Wairoa and Hawke's Bay the accounts were not so good. In parts there had been fever of a typhoid character. Paucity of children and old people was observed by several Sub-Enumerators.

Around New Plymouth there had been no sickness. The same was reported for Hutt County.

In the Middle Island, where the Native population is only a little over two thousand people, the reports speak of satisfactory health, and, for parts in respect of which comment is made, of a sufficiently prosperous condition.

Although the above leads to the conclusion that the Maoris were fairly thriving at the time of the census, there is reference in some of the reports to epidemics sweeping away numbers of the people during the five years 1891–96; and the actual results of the census indicate either (1) a decrease of population, or (2) that at the enumeration of 1891 some Natives must have been counted more than once, and where names had not been given, the number returned was greater than the reality. The comparison of the figures is as under:—

MAORIS (INCLUDING HALF-CASTES LIVING AS MEMBERS OF MAORI TRIBES).

	Persons.	Males.	Females.
April, 1891	41,993	22,861	19,132
April, 1896	39,854	21,673	18,181
Apparent decrease in five years ..	2,139	1,188	951

The numbers for the different counties cannot be compared for the two census years to much purpose, because of the movements of the Maoris during the quinquennium, but the Enumerator for Waikato distrusts the degree of decrease shown for his whole large district, though of the belief that there has been a decrease to a lesser extent. He considers that more Maoris are working for Europeans than formerly, and these are liable to be missed. Probably at next census the schedule left at the dwellings of Europeans should have a slip attached on which might be taken particulars relating to Maoris working on their farms, and not living in the kainga Maori.

In February, 1896, the numbers of Maoris on the principal islands of New Zealand was as shown hereunder:—

	Maoris.			Half-castes living as Members of Maori Tribes (included in the preceding Numbers).		
	Persons.	Males.	Females.	Persons.	Males.	Females.
North Island	37,102	20,343	16,759	2,477	1,395	1,082
Middle Island	2,207	1,166	1,041	895	485	410
Stewart Island ..	117	59	58	104	49	55
Chatham Islands—						
Maoris	179	94	85	27	15	12
Morioris	20	11	9	..	..	..
Maori wives living with European husbands ..	229	..	229	..	..	..
Totals ..	39,854	21,673	18,181	3,503	1,944	1,559

Besides the half-castes included in the above table, there were 2,259 half-castes (males, 1,123; females, 1,136) living with and enumerated as Europeans at the time of the census.

In these numbers will be noticed 20 of the old aboriginals, termed Morioris, at the Chatham Islands, and 229 Maori wives of European husbands. These Native wives of Europeans numbered 251 at the census of 1891, and 40 Morioris were then enumerated.

Half-castes.

The half-caste population consists of those who live as members of Maori tribes, and others living with and counted as Europeans in the census. Adding the numbers of the two kinds gives the following figures for three censuses:—

Census.	Half-castes living as Members of Maori Tribes. Persons.	Half-castes living as Europeans. Persons.	Total Half-caste Population. Persons.
1881	.. 2,254	1,958	4,212
1891	.. 2,681	2,184	4,865
1896	.. 3,503	2,259	5,762

These numbers indicate an increasing population of half-castes, notwithstanding the apparent decrease of the Maori population, before alluded to as probably in part correct.

Proportions of different Age-groups.

It has been stated that the decrease shown by the census of 1896 in the Maori population can scarcely be considered a certainty to the full degree exhibited. It remains to see if consideration of the proportions of the people under and over fifteen years tends to confirm the conclusion. The proportions are accordingly given for six successive census years:—

Proportions per 100 Persons Living—Maoris.

	Males.		Females.	
	Under 15 Years.	Over 15 Years.	Under 15 Years.	Over 15 Years.
1896 ..	35·28	64·72	36·82	63·18
1891 ..	33·22	66·78	35·22	64·78
1886 ..	31·64	68·36	33·56	66·44
1881 ..	33·65	66·35	34·64	65·36
1878 ..	32·00	68·00	31·63	68·37
1874 ..	35·16	64·84	36·39	63·61

The figures here, taken over the full range of years, would seem to indicate almost unchanged conditions. The proportions per cent. under 15 years of the young people of either sex are somewhat different from those found in the European population—viz.: Males under 15, 34·81; over 15, 65·19; and females under 15, 38·01; and over 15 years, 61·99. But there is nothing to indicate decrease of numbers.

Dividing the whole Maori population into ten age-periods, the proportions per 100 living of each sex at these ages are next compared with those of the European population. The proportions for persons under 5 years for the two races are very nearly the same.

Ages.	New Zealand European Population, 1896.		Maori Population, 1896.	
	Males.	Females.	Males.	Females.
Under 5 years	11·45	12·42	10·88	11·86
5 and under 10 years ..	11·75	12·80	14·43	15·02
10 " 15 " ..	11·61	12·79	9·73	9·59
15 " 20 " ..	10·88	12·17	10·29	11·90
20 " 30 " ..	17·49	19·13	17·94	18·80
30 " 40 " ..	12·47	11·92	13·22	12·71
40 " 50 " ..	9·93	8·32	10·28	9·19
50 " 60 " ..	8·21	6·07	7·50	6·30
60 " 70 " ..	4·86	3·25	3·82	3·08
70 and upwards ..	1·35	1·13	1·91	1·55
	100·00	100·00	100·00	100·00

Distribution of the Maori Population.

The localization of the Maoris is shown by the numbers found to be living in the several counties, as under :—

Counties.	Persons.	Counties.	Persons.	Counties.	Persons.
Mongonui ..	1,616	Rotorua ..	1,047	Hutt	256
Whangaroa ..	656	Tauranga ..	1,099	Sounds.. ..	139
Hokianga ..	1,839	Whakatane ..	3,524	Marlborough ..	167
Bay of Islands....	2,509	Waiapu ..	2,393	Kaikoura ..	77
Hobson ..	1,011	Cook ..	1,402	Collingwood ..	32
Whangarei ..	606	Clifton ..	368	Waimea ..	98
Otamatea ..	264	Taranaki ..	1,069	Buller ..	26
Rodney ..	193	Stratford ..	226	Westland ..	82
Waitemata ..	260	Hawera ..	816	Ashley ..	165
Eden	177	Patea ..	280	Selwyn ..	62
Great Barrier Island	60	Waitotara ..	293	Akaroa ..	238
Waiheke Island	58	Wanganui ..	1,133	Levels ..	141
Manukau ..	676	Rangitikei ..	411	Waimate ..	74
Coromandel ..	638	Oroua ..	307	Waitaki ..	180
Thames ..	1,010	Manawatu ..	149	Waikouaiti ..	168
Ohinemuri ..	483	Horowhenua ..	886	Peninsula ..	71
Piako	291	Wairoa ..	1,766	Taieri ..	61
Waikato ..	324	Hawke's Bay ..	1,326	Clutha ..	24
Waipa	294	Waipawa ..	325	Bruce ..	20
Raglan.. ..	1,269	Patangata ..	170	Southland ..	121
Kawhia ..	1,444	Pahiatua ..	30	Wallace ..	261
West Taupo ..	961	Wairarapa North	319	Stewart Island ..	117
East Taupo ..	519	Wairarapa South	349	Chatham Islands	199

229 Maori wives of European husbands have not been included in these figures.

SECTION IV.—TRADE.

Shipping.

The shipping entered inwards during 1896 comprised 589 vessels, of 614,097 tonnage; while entered outwards were 592 vessels of 627,659 tons. Comparison with the figures for the previous year shows in the entries a decrease of 22 vessels and 58,854 tons, and in the clearances a decrease of 5 vessels and 21,287 tons. Of the vessels inwards, 126, of 249,601 tons, were British; 395, of 300,176 tons, colonial; and 68, of 64,320 tons, foreign. Those outwards numbered 123, of 259,064 tons, British; 402, of 305,926 tons, colonial; and 67, of 62,669 tons, foreign. There was a fall of 25 in the number, and of 19,137 in the tonnage of colonial vessels entered, and a decline in the British shipping entered of 20 vessels and 50,066 tons. Of the entries, 277, of 138,773 tons, were sailing-vessels, and 312, of 475,324 tons, steamers. Of the clearances, 280, of 142,532 tons, were sailing-vessels, and 312, of 485,127 tons, steamers. The shipping inwards and outwards for ten years is given in the table following:—

Vessels entered, 1887–96.

Year.	Total Number.			British.			Colonial.			Foreign.		
	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crew.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.
1887 ..	653	489,754	19,806	109	144,482	4,202	472	275,085	11,828	72	70,187	3,056
1888 ..	683	526,435	20,783	130	182,020	5,352	497	276,624	12,401	56	67,791	3,030
1889 ..	781	602,634	22,649	158	206,825	5,348	547	319,131	14,162	76	76,678	3,139
1890 ..	744	662,769	23,475	190	280,105	6,786	477	298,497	13,598	77	84,167	3,091
1891 ..	737	618,515	21,889	169	265,164	6,817	507	291,800	12,951	61	61,551	2,121
1892 ..	686	675,223	22,038	203	335,577	8,274	411	265,769	11,303	72	73,877	2,461
1893 ..	617	615,604	20,935	166	290,323	7,289	405	272,250	11,745	46	53,031	1,901
1894 ..	609	631,100	21,834	141	271,994	6,456	423	306,547	13,279	45	52,559	2,099
1895 ..	611	672,951	22,074	146	299,667	6,837	420	319,313	13,209	45	53,971	2,028
1896 ..	589	614,097	19,857	126	249,601	5,495	395	300,176	12,210	68	64,320	2,152

Vessels cleared, 1887–96.

1887 ..	675	493,583	19,155	113	142,890	4,070	494	282,499	12,098	68	68,194	2,987
1888 ..	701	531,478	20,961	109	157,871	4,509	533	305,264	13,396	59	68,343	3,056
1889 ..	762	593,252	22,647	160	211,872	5,714	527	307,083	13,762	75	74,297	3,171
1890 ..	745	649,705	23,260	195	284,635	7,168	477	283,735	13,076	73	81,335	3,016
1891 ..	744	625,807	22,080	168	271,533	7,002	515	291,938	12,947	61	62,336	2,131
1892 ..	689	656,100	21,679	189	315,633	7,934	424	263,504	11,241	76	76,963	2,504
1893 ..	635	642,466	21,448	186	317,130	7,839	400	270,308	11,665	49	55,028	1,944
1894 ..	614	631,250	21,934	140	270,464	6,437	432	310,050	13,527	42	50,736	1,970
1895 ..	597	648,946	21,619	134	281,840	6,528	420	315,171	13,068	43	51,935	2,023
1896 ..	592	627,659	20,217	123	259,064	5,637	402	305,926	12,448	67	62,669	2,132

Note.—Coasting-vessels are not included in the above table.

The above figures apply to the foreign trade only; but in a new country such as New Zealand, as yet deficient in roads, but having an extensive seaboard and a number of good harbours, the coastal trade must be relatively very large, as is evidenced by the figures next given:—

SHIPPING ENTERED COASTWISE, 1896.

	Number.	Tons.
Sailing-vessels	4,480	265,552
Steamers	14,736	4,716,865

SHIPPING CLEARED COASTWISE, 1896.

	Number.	Tons.
Sailing-vessels	4,376	266,295
Steamers	14,652	4,702,331

The total number of vessels entered coastwise was thus 19,216, of 4,982,417 tons, being an increase of 1,162 vessels and 127,480 tons on the figures for 1895. The clearances coastwise were 19,028 vessels, of 4,968,626 tons, an increase of 977 vessels and 109,650 tons on the number for the previous year. The number and tonnage of the registered vessels belonging to the several ports on the 31st December, 1896 (distinguishing sailing-vessels and steamers), was as under:—

REGISTERED VESSELS, 31ST DECEMBER, 1896.

Ports.	Sailing-vessels.			Steam-vessels.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland	172	13,478	13,126	70	9,936	6,198
Napier	7	778	755	12	954	568
Wellington	26	5,085	4,902	21	3,523	2,117
Nelson	13	339	339	9	715	449
Lyttelton	28	5,041	4,964	8	1,260	549
Dunedin	47	11,229	11,076	60	50,632	30,587
Invercargill	16	2,279	2,194	3	304	190
Totals	309	38,229	37,356	183	67,324	40,658

IMPORTS AND EXPORTS.

The quantities and values of imports used in making up the figures given in this portion of the statistical report are obtained from Customs entries, verified where necessary, as with goods subject to an *ad valorem* duty, by examination. For exports, the "free on board in New Zealand" value is given; but, as regards the main items, the Collector of Customs examines carefully the amounts stated, and compares them with current price-lists, to prevent any over-estimate. Goods transhipped at a foreign port are regarded as imported from the country where they were originally shipped, and exports as destined for the country where it is intended to land them. The countries named, however, may not be those of origin

or destination, as no attempt is made to trace the goods beyond the ports disclosed by the documents presented to the Customs. Very little cargo *in transitu* passes through New Zealand.

The total declared values of the imports in 1896 amounted to £7,137,320, being an increase on the corresponding total in 1895 of £737,191. These figures are, however, somewhat misleading, as they include specie. The value of coin brought into the colony in 1896 was £101,941, against £284,176 in the previous year, and if these items are excluded, the increase on the values of all other articles will be found to reach the sum of £919,426.

The following table gives the value of imports for each of the past twelve years:—

Year.	Imports, inclusive of Specie. £	Imports, exclusive of Specie. £
1885	7,479,921	7,278,101
1886	6,759,013	6,319,223
1887	6,245,515	6,064,281
1888	5,941,900	5,430,050
1889	6,308,863	5,980,583
1890	6,260,505	5,928,625
1891	6,503,849	6,481,101
1892	6,943,056	6,742,544
1893	6,911,515	6,494,279
1894	6,788,020	5,990,177
1895	6,400,129	6,115,953
1896	7,137,320	7,035,379

It will be seen that the value of imports, exclusive of specie, fell by degrees from £7,278,101 in 1885 (the first year of the series) to £5,430,050 in 1888; from the latter year it rose till it reached £6,742,544 in 1892; while in 1893 it again showed a decline—3·68 per cent., in 1894 a further decline of 7·76 per cent., in 1895 an increase of 2·10 per cent., and in 1896 a further increase of 15·03 per cent.

Of £7,035,379, total value of goods imported during 1896, the chief items were as under:—

Articles.	Value. £	Proportion per Cent.
Clothing, drapery, &c.	1,890,293	26·87
Metal, machinery, and implements ..	1,095,206	15·57
Tea and sugar	588,994	8·37
Wine, beer, spirits, and tobacco ..	386,555	5·49
Paper and books	315,549	4·49
Other imports	2,758,782	39·21
	7,035,379	100·00

The value of the clothing, drapery, &c., imported increased from £1,622,648 in 1895 to £1,890,293 in 1896. In 1884, with a population smaller by more than 20 per cent., the value of the import was £1,819,674. The iron, machinery, and implements imported in 1896 were valued at £1,095,206 an increase of £313,604 on the corresponding figures for 1895 (£781,602). In 1884 the import of these goods was valued at £1,255,981.

The value of sugar (including molasses and treacle) imported in 1896 was £422,134, an increase of £32,525 on the amount for 1895 (£389,609). This import for the last three years has averaged £423,938 per annum, but for the three years 1882, 1883, and 1884 the average, with a much smaller population, was £615,207 for each year. The smaller average amount for the last three years is due, not to a reduction in the quantity imported, but partly to a fall in the price of sugar and partly to the fact that the proportion of refined to raw sugar has vastly decreased.

The following table, giving the consumption per head of sugar in different countries, is, saving the figures for New Zealand—which are for 1895, and exclude a proportion deducted on account of Maoris—taken from the Victorian Year-book of 1893. The figures stating the consumption of tea, given further on, are taken from the same source.

ANNUAL CONSUMPTION OF SUGAR PER HEAD IN VARIOUS COUNTRIES.

	Lb.		Lb.
South Australia	102·11	Sweden	17·52
New Zealand	93·59	Belgium	15·74
Western Australia	93·51	Germany	15·01
Victoria	90·75	Austria-Hungary	13·23
Tasmania	90·49	Norway	11·37
United Kingdom	68·99	Finland	11·22
Queensland	62·93	Portugal	9·56
New South Wales	60·95	Roumania	7·71
Argentine Republic	50·04	Russia	7·69
Denmark	29·69	Spain	5·11
Holland	28·37	Servia	4·41
Switzerland	22·81	Italy	3·20
France	22·61		

The quantity of tea entered for consumption in 1896 was 4,431,473 lb. Supposing Maoris to use, on an average, 1 lb. per head per annum, the consumption of tea per head of the population, exclusive of Maoris, would be 6·21 lb. in 1896.

ANNUAL CONSUMPTION OF TEA PER HEAD.

	Lb.		Lb.
Western Australia	10·70	Denmark	0·37
Victoria	10·01	Persia	0·13
Queensland	8·96	Portugal	0·12
New South Wales	7·55	Switzerland	0·10
South Australia	7·24	Norway	0·09
New Zealand	6·21	Germany	0·07
Tasmania	5·35	Belgium	0·03
United Kingdom	4·70	Sweden	0·03
Canada	3·69	France	0·03
United States	1·40	Austria-Hungary	0·02
Holland	1·16	Spain	0·01
Russia	0·61		

During 1896 excise duty was paid on 5,382,960 gallons of beer; and 182,082 gallons of beer, 451,679 gallons of spirits, and 99,473 gallons of wine were entered at the Customs for home consumption. The following table gives the consumption per head of alcoholic liquors by the people, excluding and including Maoris, showing

separately the proportions of beer, wine, and spirits for the last fourteen years. To the amount of beer manufactured in the colony in each year on which excise duty was paid has been added the amount brought into consumption from imports:—

Year.	Beer.		Spirits.		Wine.	
	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.
	Gal.	Gal.	Gal.	Gal.	Gal.	Gal.
1883	9·435	8·709	1·088	1·005	0·315	0·291
1884	8·769	8·121	0·999	0·923	0·272	0·253
1885	8·414	7·840	0·899	0·825	0·261	0·243
1886	7·861	7·333	0·820	0·765	0·212	0·198
1887	7·651	7·148	0·770	0·719	0·198	0·185
1888	7·133	6·670	0·820	0·767	0·167	0·156
1889	7·624	7·136	0·598	0·560	0·176	0·165
1890	7·899	7·402	0·693	0·649	0·184	0·172
1891	7·646	7·168	0·699	0·655	0·172	0·161
1892	7·807	7·328	0·708	0·664	0·174	0·163
1893	7·716	7·255	0·697	0·656	0·170	0·159
1894	7·391	6·961	0·648	0·611	0·144	0·136
1895	7·421	6·996	0·629	0·593	0·135	0·127
1896	7·873	7·453	0·639	0·605	0·141	0·133

It is most satisfactory to observe how favourably the above rates of consumption in this colony compare with those of other countries. A comparison can be made by means of the following statement of the annual consumption of beer and spirits per head in various places:—*

—	Beer.	Spirits.	—	Beer.	Spirits.
	Ga	Gal.		Gal.	Gal.
United Kingdom ..	28·74	1·00	Tasmania	10·02	0·59
South Australia ..	20·04	0·49	Switzerland ..	8·15	1·04
Germany	19·38	0·95	New Zealand (including Maoris)	7·45	0·60
Victoria	19·36	1·12			
Holland	19·05	2·08	Austria-Hungary ..	6·83	0·63
New South Wales ..	11·94	1·15	France	4·53	0·85
United States ..	10·74	1·34	Canada	3·05	1·19
Queensland	10·23	1·59	Sweden	2·52	4·20

The actual quantity of beer made and used in the colony has increased from 4,402,720 gallons in 1885 to 5,382,960 gallons in 1896.

BEER MANUFACTURED IN NEW ZEALAND ON WHICH EXCISE DUTY WAS PAID.

	Gal.		Gal.
1885	4,402,720	1891	4,567,920
1886	4,243,760	1892	4,752,720
1887	4,264,160	1893	4,873,600
1888	4,050,560	1894	4,807,360
1889	4,402,480	1895	4,936,400
1890	4,676,240	1896	5,382,960

* Taken, except as regards New Zealand, from the Victorian Year-book of 1894.

The tobacco entered for consumption in 1896 was 1,558,643 lb., and the consumption per head of population, including Maoris, 2·09 lb.

AVERAGE ANNUAL CONSUMPTION PER HEAD OF TOBACCO IN VARIOUS COUNTRIES.

	Lb.		Lb.
Holland	6·92	Denmark	2·24
United States	4·40	Canada	2·11
New South Wales	3·53	New Zealand	2·09
Queensland	3·49	France	2·05
Western Australia	3·26	Sweden	1·87
Switzerland	3·24	Tasmania	1·85
Belgium	3·15	Russia	1·82
Germany	3·00	South Australia	1·70
Victoria	2·93	United Kingdom	1·38
Austria-Hungary	2·73	Italy	1·28
Finland	2·73	Spain	1·10
Norway	2·29		

The imports from the United Kingdom to New Zealand in 1896 were valued at £4,714,476, or an increase of £722,117 on the imports from this source for the previous year. From Australia and Tasmania the imports were £1,090,374, a decrease of £170,751 on the amount in 1895.

The following are the values of imports from different countries or places in 1895 and 1896, given in the order of the increase or decrease from each :—

Country.	1895. £	1896. £	Increase. £
United Kingdom	3,992,359	4,714,476	722,117
United States, East Coast	351,823	419,689	67,866
" West Coast	42,410	73,151	30,741
Germany	78,034	101,381	23,347
Ceylon	79,892	95,961	16,069
Japan	16,991	27,702	10,711
Fiji and Norfolk Island	224,798	235,032	10,234
Mauritius	12,474	21,219	8,745
Pacific Islands	57,773	66,127	8,354
Belgium	16,862	25,023	8,161
Switzerland	3,282	9,282	6,000
Dominion of Canada	14,508	19,688	5,180
France	12,696	17,810	5,114
China (excepting Hongkong)	13,285	17,089	3,804
Asia Minor	3,291	6,807	3,516
Greece	1,706	5,011	3,305
Holland	8,548	11,064	2,516
Italy	4,094	6,354	2,260
Algeria	..	840	840
Philippine Islands	3,637	4,401	764
Java	3,056	3,470	414
Uruguay	..	220	220
Norway	70	289	219
Jamaica	8	134	126
Austria	131	238	107
Sweden	313	402	89
Denmark	35	98	63
Canary Islands	163	216	53
Cape Colony	58	101	43
Others	44	134	90

Country.	£	£	Decrease. £
Australia and Tasmania	1,261,125	1,090,374	170,751
British India	153,241	125,498	27,743
Hongkong	25,379	22,338	3,041
Portugal	2,027	1,225	802
Spain	1,719	1,116	603
Singapore	11,457	10,924	533
Egypt	977	679	298
West Indies (other than Jamaica)..	1,811	1,757	54
Argentine Republic	52	..	52

Details of all imports during 1896, giving quantities and values of articles introduced into the colony, with the amounts entered for Home consumption, and the amount of duty received, are next shown:—

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING THE YEAR, 1896.

(For rates of Duty see Tariff, p. 63.)

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Acid—				
Acetic	137,946 lb.	2,182	166,232 lb.	1,038 19 0
Carbolic	35,111 „	508	..	..
Salicylic	1,934 „	252	..	..
Sulphuric	127,617 „	1,286	..	..
Tartaric	91,072 „	5,741	91,368 lb.	380 14 0
Unenumerated ..	53,229 „	1,183	..	..
Alkali—				
Soda-ash	5,824 cwt.	1,825	..	..
Soda, carbonate and bi-carbonate	7,869 „	3,349	7,624 cwt.	381 3 7
Soda, caustic	12,739 „	7,482	..	..
Soda, crystals	135 „	30	134 cwt.	13 8 9
Soda, silicate	2,196 „	766	..	..
Potash and caustic potash	1,050 „	1,699	..	..
Unenumerated ..	4,555 „	2,544	..	..
Alum	522 „	228	..	..
Animals, living—				
Bees	..	12	..	..
Birds	267 No.	151	..	..
Cattle, horned	11 „	1,010	11 No.	5 10 0
Dogs	103 „	1,275	..	..
Horses	528 „	9,338	527 No.	257 0 0
„	12 „	1,260	..	..
Kangaroos	2 „	4	..	..
Opossums	1 „	2	..	..
Ostriches	14 „	840	..	..
Pigs	16 „	216	..	..
Poultry	236 „	465	..	..
Sea-elephants	1 „	20	..	..
Sheep	83 „	2,054	..	..
Turtles	10 „	8	..	..
Apparel and slops n.o.e. ..	..	367,725	£365,752	91,438 0 9
„ ..	..	1,057	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Apparel and slops made to the order of residents in the colony ..	..	1,734	£1,736	694 4 5
Arms, ammunition, and explosives—				
Accoutrements ..	..	597	..	..
Caps, percussion ..	5,057,700 No.	749	..	..
Cartridges, shot, 10- to 24-bore	1,864,315 „	5,600	1,838,100 No.	1,378 11 6
Ditto	603,100 „	5,144	..	..
Cartridges n.o.e. ..	3,066,300 „	2,009	£2,012	402 9 11
Cartridge-cases ..	541,305 „	734	537,655 No.	201 12 5
„ ..	179,973 „	328	..	..
Detonators for dynamite	1,509,500 „	3,086	..	..
Dynamite	159,930 lb.	13,085	..	..
Firearms	2,845 No.	4,888	£4,752	950 6 2
Fuse	156,650 coils	4,538	..	..
Lithofracteur, cordite, and similar explosives	251,320 lb.	18,090	..	..
Ordnance stores ..	..	6,539	..	..
Powder, blasting ..	257,092 lb.	5,495	..	..
Powder, sporting	27,066 „	2,951	25,950 lb.	648 15 0
„ ..	34,900 „	1,436	..	..
Shot	537 cwt.	490	514 cwt.	256 16 0
Swords	16 No.	61	..	..
Unenumerated ..	..	762	..	..
Asphalt	20 cwt.	8	..	..
Bacon and hams	439 lb.	15	451 lb.	3 15 2
„ ..	1,108 „	20	..	..
Bags and sacks—				
Cornsacks	249,945 doz.	53,048	..	..
Unenumerated ..	7,624 „	374	£402	80 8 0
„ ..	25 „	4	£4	0 12 0
„ ..	12,862 „	2,349	..	..
Bagging and sacking ..	..	190	..	..
Basket and wickerware ..	..	1,284	£1,292	258 8 0
„ ..	..	3	..	..
Bêche de mer	2 cwt.	2	£2	0 8 0
Beer	178,879 gals.	35,118	182,082 gals.	18,208 3 2
„	20 „	5	..	..
Belting, leather ..	29,987 lb.	3,447	26,990 lb.	499 16 9
Belting, other than leather	..	6,705	..	..
Beverages, non-alcoholic—				
Aërated and mineral waters	7,004 doz.	1,407	£1,291	258 5 2
Ditto	72 „	11	..	..
Coffee, essence ..	..	5,660	£5,762	1,152 8 2
Limejuice, sweetened ..	3,544 gals.	870	£917	229 4 8
„ unsweetened	81,152 „	5,747	..	..
Unenumerated ..	..	416	£470	117 11 4
Bicycles and tricycles ..	5,101 No.	58,762	£58,114	11,622 15 6
„ ..	13	156	..	..
Materials for ..	..	15,840	£15,467	3,093 9 7
„ ..	..	24,906	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Biscuits—				
Fancy, and other kinds..	10,280 lb.	486	10,280 lb.	85 13 3
Ship's plain	18 cwt.	22	19 cwt.	2 16 5
Blacking	..	2,885	£2,840	568 0 1
Blacklead	..	2,792	£2,979	595 15 2
Blue	212,435 lb.	5,733	195,299 lb.	1,627 9 10
Boats	21 No.	1,602	..	..
Bones	2,941 tons	8,698	..	..
Books, &c., printed ..	..	111,344	..	..
Boots and shoes	62,173 doz.prs	118,988	£119,611	26,912 9 11
Nos. 0 to 3	2,472 „	2,203	..	..
Gum-boots	620 „	6,794	..	..
Borax	930 cwt.	1,124	..	..
Brass—				
Pigs, bars, tubes, or sheets	650 „	2,400	..	..
Tubing and stamped-work in the rough ..	82 „	396	..	..
Manufactures	..	3,837	£3,844	768 14 9
.. ..	..	330	..	..
Bricks—				
Fire	197,418 No.	985	£983	196 12 0
Other kinds	24,790 „	97	..	..
Brushware and brooms—				
Brooms	2,360 doz.	1,164	£1,290	322 10 0
Brushes (clothes, hair, hat, and toilet) ..	..	3,283	£3,299	659 15 5
Unenumerated ..	..	6,402	£6,505	1,626 5 3
„ ..	..	50	..	..
Materials for	..	4,675	..	..
Buckets and tubs—				
Iron	2,729 doz.	1,497	£1,469	367 4 11
Wood	18 „	9	£14	2 16 10
Building materials—				
Unenumerated ..	..	4	..	..
Butter	2 cwt.	8	..	..
Candles..	1,873,713 lb.	31,830	1,924,080 lb.	16,033 19 11
Canes and rattans ..	..	792	..	..
Canvas	..	24,279	..	..
Caramels, brewers' ..	7,297 lb.	134	7,306 lb.	91 6 6
Cards, playing	56,757 packs	1,052	58,586 packs	1,464 13 0
Carpeting and druggeting..	..	27,494	£27,648	5,529 10 3
Carriages, &c.—				
Carriages	84 No.	1,977	£1,952	390 8 4
Carts, drays, and wagons	101 „	777	£751	150 6 0
Perambulators and go-carts	154 „	245	£245	49 0 0
Materials for	..	3,027	£3,102	620 7 0
„	..	675	..	..
Materials for: axles, axle-arms, and boxes ..	..	6,005	..	..
Carriage and cart shafts, spokes, and felloes in the rough	..	4,954	..	..
Carriage and cartmakers' materials	..	10,391	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Casks, empty	1,152 No.	870	£870	174 0 0
"	846 "	119	..	..
Cement	72,232 barrels	32,412	72,127 barrels	7,212 14 0
"	1,100 "	468	..	..
Chains and chain-cables ..	4,384 cwt.	3,934	..	..
Charcoal	9,899 "	2,169	..	..
Cheese	37 "	159	£158	31 11 0
"	..	2	..	..
"	31 "	69	..	..
Chicory	221 lb.	10	221 lb.	2 15 3
China, porcelain, and parian-ware	..	10,775	£10,696	2,139 3 0
Ditto	..	5	..	..
Clocks	30,772 No.	7,977	£7,974	1,594 16 6
"	1 "	23	..	..
Coals	101,756 tons	94,138	..	..
Cocoa and chocolate ..	269,597 lb.	25,800	265,312 lb.	3,316 7 11
Cocoa-beans	84,460 "	1,930	..	..
Coffee—				
Raw	294,172 "	13,669	257,344 lb.	2,144 10 9
Roasted	1,714 "	96	1,490 "	31 0 10
Coke	555 tons	1,302	..	..
Combs	..	801	£788	157 11 9
Confectionery—				
Chocolate confectionery: plain trade packages	69,661 lb.	3,359	67,322 lb.	841 10 5
Chocolate confectionery: fancy packages ..	..	2,456	£2,458	491 12 10
Unenumerated ..	222,067 lb.	7,401	217,770 lb.	1,814 15 0
Copper—				
Nails	149 cwt.	563	..	..
Pig, bar, sheet, and tube	3,090 "	10,092	..	..
Rod and bolt	214 "	618	..	..
Sheathing	346 "	939	..	..
Copper manufactures ..	..	198	£223	44 10 7
Copra	1,178 tons	10,395	..	..
Cordage	3,652 cwt.	8,330	£7,975	1,595 1 8
"	8 "	40	..	..
Hawsers of 12in. and over	157 "	243	..	..
Iron and steel	4,908 "	10,172	..	..
Cork, cut	..	5,091	£5,178	1,035 13 3
Cotton piece-goods—				
Calico, white and grey ..	..	128,139	..	..
Corduroy, moleskin, and beaver-skin	..	17,603	..	..
Shirtings, coloured cotton	..	46,422	..	..
" flannelette ..	..	11,152	..	..
" union, of 6d. per yard and under ..	..	3,307	..	..
Unenumerated ..	..	110,126	£108,428	21,685 11 6
" ..	..	84,438	£81,186	8,118 11 3
Butter- and cheese-cloth	..	2,323	..	..
Leather-cloth	..	3,618	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued*.

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Cotton piece-goods—*contd.*		£		£ s. d.
Tubular-woven cotton-cloth	..	168	..	..
Waterproof material	..	27,377	..	..
Cotton—				
Raw	34,548 lb.	649	..	..
Waste	2,171 cwt.	3,009	..	..
Wick	72,524 lb.	3,048	..	..
Cutlery	..	17,384	£17,538	3,507 10 2
Doors, plain	3 No.	2	3 No.	0 6 0
"	250 "	100	..	..
Drapery	..	222,831	£222,429	44,485 16 0
"	..	4	..	..
Lace and laces n.o.e.	..	16,509	£16,543	4,135 16 2
Ribbons and crape	..	9,891	£9,857	2,464 4 9
Tailors' trimmings	..	87,604	..	..
Drugs, chemicals, and druggists' wares—				
Baking powder, yeast preparations, &c.	..	723	£617	123 7 0
Chemicals n.o.e.	..	2,291	£2,129	425 16 6
"	..	533	..	..
Cream of tartar	518,683 lb.	25,123	526,270 lb.	2,192 15 10
Drugs, druggists' sundries, and apothecaries' wares	..	50,010	£47,646	9,529 4 7
Ditto	..	80	..	..
Ditto	..	33	..	..
Glycerine used in the manufacture of tobacco	..	..	£22	..
Tinctures and medicinal spirits	22,803 lb.	1,413	29,671 lb.	1,483 10 9
Ditto	7,840 "	864	8,364 "	209 1 11
Anhydrous ammonia	..	1,704	..	..
Arsenic	1,858 cwt.	2,164	..	..
Disinfectants	..	2,222	..	..
Food preservative	..	1,010	..	..
Gums	..	2,153	..	..
Insecticides and tree-washes	..	621	..	..
Maltine	..	551	..	..
Medicinal barks, leaves, &c.	..	749	..	..
Phosphorus	..	2,399	..	..
Potassium cyanide	1,621 cwt.	9,695	..	..
Sheep-dip	..	19,015	..	..
Sheep- and horse-drenches and sheep-licks	..	432	..	..
Unenumerated	..	11,722	..	..
Dyes	..	13,600	..	..
Earthenware	..	47,925	£47,855	9,571 1 3
"	..	15	..	..
"	..	3	..	..
"	..	558	..	..
Eggs	8 dozen	8	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Engine-packing	1,103 cwt.	3,352	..	..
Essences, flavouring ..	881 gallons	2,278	766 gallons	612 17 10
" ..	..	1,792	£1,793	268 19 6
Essential oils—				
Eucalyptus	8,779 lb.	1,517	£1,539	307 16 0
Other kinds	30,493 "	6,453	..	..
Fancy goods and toys ..	..	87,191	£87,068	17,413 13 5
" ..	..	40	..	..
" ..	..	1,841	..	..
Felt sheathing	..	4,615	..	..
Fire-hose and other appliances	..	730	..	..
Fireworks	..	450	£450	90 0 0
"	..	54	..	..
Fish—				
Anchovies, salted ..	3 cwt.	8	..	..
Dried, pickled, or salted	2,180 "	3,246	2,186 cwt.	1,093 3 5
Potted and preserved ..	1,141,659 lb.	27,400	1,102,435 lb.	9,186 19 2
Fish ova	..	150	..	..
Fishing tackle—				
Artificial flies	..	108	£108	27 0 0
Fish-hooks	..	308	..	..
Unenumerated ..	..	1,418	£1,341	268 2 4
Flock	54 cwt.	69	£64	6 8 0
Floorcloth and oilcloth ..	..	49,708	£49,908	9,981 13 0
" ..	..	65	..	..
Flour	1,154 centals	479	..	..
Foods, animal—				
Chaff	7 tons	26	7 tons	6 19 6
Hay	2 "	5	..	..
Prepared calf-meal ..	1 ton	11	1 ton	1 5 0
Unenumerated ..	..	1,714	£1,671	334 4 0
Foods, farinaceous—				
Arrowroot	64,210 lb.	786	..	..
Macaroni and vermicelli	74,889 "	960	..	..
Maizena and corn-flour..	859,525 "	11,690	781,512 lb.	814 1 6
Sago and tapioca ..	14,401 cwt.	7,027	..	..
Unenumerated ..	..	1,891	..	..
Fruits, bottled and preserved	19,345 doz.	5,451	£5,349	1,337 2 7
Fruits, dried—				
Currants	3,004,970 lb.	18,219	2,883,127 lb.	24,026 1 2
Raisins	1,675,717 "	18,658	1,693,255 "	14,027 2 5
Unenumerated ..	774,346 "	9,931	785,311 "	6,544 5 2
Fruit, fresh—				
Apples, pears, plums, &c.	544,404 "	6,824	544,365 "	2,268 3 9
Apples, pears\.. ..	832,042 "	7,537	832,042 "	1,733 8 5
Currants, raspberries, &c.	125,020 "	1,170	125,020 "	260 9 2
Lemons	378,456 "	4,891	378,456 "	788 9 0
Other kinds	16,979,051 "	69,330	..	..
Fruit—				
Lemon- and orange-peel, in brine	465,944 "	2,812	.. .. ..	[illegible]

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Fruit—*continued.*				
Preserved by sulphurous acid	13,156 lb.	142	13,156 lb.	54 16 4
Fruit-pulp and partially-preserved fruits	2,928 "	51	2,928 "	18 6 0
Fungus	168 cwt.	219	..	..
Furniture, cabinetware, and upholstery	..	24,918	£24,708	6,176 19 10
Ditto	..	6	..	..
Kapok	2,627 cwt.	8,763	..	..
Unenumerated	..	3,628	..	..
Furniture-, knife-, and plate-powder and polish	..	2,752	£2,730	545 19 11
Furs	..	3,209	£3,209	802 5 0
Gelatine and isinglass	41,735 lb.	3,928	£4,114	822 16 2
Glass—				
Bottles, empty	..	19,898	..	..
Mirrors and looking-glasses	..	5,369	£5,303	1,325 16 1
Plate, bevelled, &c.	..	2,658	£2,648	662 0 0
Ditto	..	29	..	..
Plate, other kinds	174,099 sup. ft.	5,103	£5,077	1,015 9 4
Window	1,931,801 "	11,954	1,919,988 sup. ft.	1,919 19 9
Glassware	..	20,074	£19,787	3,957 7 2
"	..	123	..	..
"	..	4,067	..	..
Glue and size	79,890 lb.	1,477	80,534 lb.	503 6 9
"	595 "	29	..	..
Gold-leaf	..	754	..	..
Grain and pulse—				
Barley	137 centals	53	136 centals	13 12 6
Beans and peas	1,412 "	660	1,407 "	52 15 6
Oats	53 "	22	53 "	1 19 6
Wheat	5 "	3	5 "	0 3 9
Unenumerated	10,256 "	3,528	10,176 "	381 12 4
Ground, unenumerated	1,524 "	1,497	1,276 "	63 16 3
"	20 "	4	..	..
Grease	1,778 cwt.	1,243	£1,201	240 4 11
Grindery—				
Heel-plates, &c.	..	973	£975	219 8 0
Unenumerated	..	16,693	..	..
Gum, kauri	3 tons	162	..	..
Haberdashery	..	10,213	£10,255	2,051 0 1
Buttons, &c.	..	26,220	..	..
Sewing-cottons, silks and threads	..	30,449	..	..
Unenumerated	..	1,591	..	..
Hair	302 cwt.	1,358	..	..
Hardware, holloware, and ironmongery	..	152,199	£150,423	30,084 12 10
Ditto	..	1,176	..	..
Coffin furniture	..	1,156	£963	192 12 0
Hardware	..	2,030	..	..
Hats and caps	72,983 doz.	58,310	£57,143	14,285 12 7

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Hatters' materials ..	..	4,275	..	..
Hemp	97 tons	2,449	..	..
Hides	36,523 No.	26,999	..	..
Hops	69,881 lb.	2,982	80,422 lb.	2,010 11 0
"	4,154 "	105	..	..
Hosiery	..	82,984	£82,039	16,407 14 4
Indiarubber and gutta-percha goods	..	25	£25	5 0 0
Ditto	..	6,808	..	..
Ink, printing	85,019 lb.	3,235	..	..
Writing	..	1,518	£1,528	305 10 10
"	..	95	..	..
Instruments, musical—				
Harmoniums and organs	447 No.	4,830	£4,860	972 0 2
Pianofortes	1,915 No.	40,376	£40,201	8,040 5 10
Unenumerated ..	..	8,381	£8,343	1,668 11 4
For Volunteer band ..	..	42	..	..
Materials for	..	77	£76	15 4 0
"	..	1,728	..	..
Instruments—				
Optical	..	1,749	..	..
Scientific	..	4,210	..	..
Surgical and dental ..	..	8,544	..	..
Surveying	..	666	..	..
Unenumerated ..	..	29	..	..
Iron and steel—				
Angle..	130 tons	1,141	..	..
Bar, bolt, and rod ..	9,063 "	72,490	..	..
Bolts and nuts ..	1,735 cwt.	1,352	£1,334	266 15 8
" ..	253 "	178	..	..
" ..	3,810 "	4,364	..	..
Castings for ships ..	6 tons	527	..	..
Galvanised manufactures	..	1,491	£1,488	371 19 7
"	..	72	..	..
Hoop	1,069 tons	9,399	..	..
Hoop, galvanised ..	1,736 cwt.	1,199	1,733 cwt.	129 19 8
Pig	5,027 tons	18,645	..	..
Pipes and fittings ..	4,732 "	41,307	£41,267	2,063 7 1
Rails	4,436 "	26,107	..	..
Railway bolts and fastenings	16 "	184	£184	36 16 0
Ditto	240 "	3,301	..	..
Sheet and plate ..	3,519 "	31,697	..	..
Sheet, galvanised, corrugated	208,852 cwt.	159,902	205,201 cwt.	20,520 2 2
Sheet, galvanised, plain	29,318 "	23,206	29,008 "	2,175 12 8
Staples, standards, &c. ..	441 tons	4,434	£4,411	882 5 3
" ..	8 "	100	..	..
Tanks	2,205 No.	5,780	2,167 No.	1,083 10 0
"	461 "	805	471 "	117 15 0
Wire, fencing, barbed ..	3,022 tons	33,380	..	..
Wire, fencing, plain ..	7,536 "	61,638	..	..
Wire-netting	..	22,774	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Iron and steel—*continued.*		£		£ s. d
Wire, telegraphic and telephonic	42 tons	567	..	..
Wire, unenumerated ..	264 „	4,126	..	..
Unenumerated ..	243 „	2,151	..	..
Jams, jellies, and preserves	261,225 lb.	4,173	242,218 lb.	2,018 8 11
Jellies, concentrated ..	29,204 „	1,129	29,185 lb.	486 8 3
Jewellery	..	19,228	£19,084	3,816 16 10
„	..	379	..	..
Lamps, lanterns, and lamp-wick	..	10,772	£11,042	2,208 7 4
Ditto	..	108	..	..
Lead—				
Pigs and bars	426 tons	5,327	..	..
Pipe (including composition)	224 cwt.	184	225 cwt.	39 8 6
Sheet	12,941 „	9,017	12,821 „	961 10 11
„	1,014 „	999	..	..
Manufactures	..	172	£172	34 8 0
Leather	525,408 lb.	71,472	10,064 lb.	167 14 10
„	..	..	92,358 „	1,154 9 6
„	..	..	174,444 „	1,453 13 11
„	..	..	246,965 „	1,029 0 5
„	672 lb.	185	..	..
„	36,721 „	6,685	..	..
„ Chamois ..	..	497	£501	100 3 4
„ „ ..	..	46	..	..
Leather manufactures—				
Boot and shoe vamps, uppers, and laces ..	..	8,017	£7,937	1,785 14 9
Unenumerated ..	..	439	£397	89 6 6
„ ..	..	621	£624	124 18 0
Lighthouses, materials for	..	3,154	..	..
Linen piece-goods—				
Forfar, dowlas, and flax sheeting n.o.e. ..	..	14,983	£2,727	545 6 3
Forfar, dowlas, &c., cut up under supervision ..	..	..	£11,547	..
Linens n.o.e.	..	14,604	£13,668	2,733 11 0
„	..	4	..	..
Hessians and scrim ..	..	27,716	..	..
Unenumerated ..	..	18	..	..
Linseed	29 cwt.	26	29 cwt.	1 9 0
Liquorice	..	1,667	£1,725	344 19 7
Machinery and machines—				
Agricultural	..	18,589	£18,610	930 10 6
„	..	45,612	..	..
Ploughs and harrows ..	..	6,894	..	..
Dairying	..	1,223	£1,367	68 7 2
„	..	6,652	..	..
Dredging	..	1,145	£1,145	57 5 0
Electric	..	6,617	£6,617	661 14 0
„	..	11,443	..	..
Engines, steam ..	11 No.	3,952	£3,924	784 17 0

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Machinery, &c.—*continued.*		£		£ s. d.
Engines, steam ..	1 No.	171	..	..
Engines, gas	89 „	6,485	..	..
Engines, boilers for ..	4 „	448	£377	75 8 0
Flour-milling	..	3,221	£3,234	161 14 6
Gas-making	..	12,480	£12,584	1,258 8 0
„	..	1,160	..	..
Mining	..	48,031	£48,541	2,427 1 3
„	..	1,143	.. ..	..
Paper-milling	..	311	£311	15 11 0
„	..	103	..	..
Portable and traction engines	18 No.	8,816	£9,928	496 8 0
Printing	..	4,795	£4,832	241 12 0
„	..	71	..	..
Refrigerating	..	15,430	£15,420	771 0 0
Sewing and knitting ..	7,173 No.	24,641	..	..
Wood-working ..	..	4,799	£4,799	239 19 0
„ ..	..	300	..	..
„ ..	..	1,506	..	..
Woollen-milling ..	..	7,211	£7,211	360 11 0
„ ..	..	1,698	..	..
Unenumerated ..	..	18,025	£15,563	3,112 12 7
„ ..	..	735	..	..
„ ..	..	1,640	£1,715	171 10 0
„ ..	..	600	..	..
„ ..	..	4,283	£4,293	214 13 0
„ ..	..	334	..	..
Materials for and parts of	..	2,273	..	..
„ „	..	..	£957	191 8 0
„ „	..	..	£6	0 12 0
„ „	..	..	£1,341	67 1 0
„ „	..	260	..	..
„ „	..	10,343	..	..
Malt	959 bushels	304	959 bushels	95 17 4
„	488 „	61	..	..
Rice malt	29,596 lb.	189	29,596 lb.	123 6 4
Manures—				
Bone-dust	3,872 tons	14,777	..	..
Guano	7,362 „	22,703	..	..
Unenumerated ..	6,402 „	24,962	..	..
Marble—				
Dressed or polished and manufactured ..	..	2,859	£2,899	724 13 0
Hewn or rough-sawn ..	269 „	1,916	..	..
Matches and vestas—				
Wax	46,005 gross	12,351	..	..
„	..	..	33,533 gross	1,956 2 0
„	..	..	3,455 „	302 6 7
„	..	..	14,463 „	3,615 15 0
„	..	..	1,835 „	229 8 3
Wooden	14,910 gross	1,458	..	..
„	..	..	13,226 „	661 5 8
„	..	..	1,322 „	132 5 0

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued*.

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Mats and matting ..	..	5,267	£5,197	1,039 9 7
.. ..	..	389	..	..
"	..	1	..	..
Meats—				
Potted and preserved ..	43,287 lb.	1,817	£1,880	375 18 6
" ..	1,562 "	26	..	..
Medicines, patent and proprietary	..	33,034	..	12,408 3 0
Metal, manufactures of—				
Japanned and lacquered metalware ..	..	601	£591	147 17 6
Ditto	..	10,997	£11,067	2,213 6 11
"	..	557	..	..
"	..	35	..	..
Weighbridges and weighing-machines ..	..	1,912	£1,926	385 3 1
Ditto	..	60	..	..
Anchors	369 No.	215	..	..
Rivets and washers ..	3,824 cwt.	3,446	..	..
Tacks	1,549 "	1,884	..	..
Type-writers	245 No.	3,936	..	..
Unenumerated ..	..	22,550	..	..
Metal sheathing, other than copper	1 cwt.	2	..	..
Milk, preserved	865,222 lb.	17,758	£15,418	3,854 8 8
"	4,704 "	72	..	
Millinery—				
Feathers, ornamental ..	..	2,771	£2,764	691 1 1
Other kinds	..	26,095	£25,980	6,495 0 3
Mustard	203,731 lb.	11,527	210,095 lb.	1,750 15 11
Nails—				
Iron	51,189 cwt.	31,752	50,720 cwt.	5,071 19 1
"	752 "	497	..	..
Unenumerated ..	22 "	55	21 cwt.	3 1 11
Naphtha	9,231 galls.	1,220	9,814 galls.	245 6 10
Nuts—				
Almonds, in shell ..	19,984 lb.	332	21,687 lb.	180 14 7
Almonds, shelled ..	30,528 "	1,840	31,325 "	391 11 4
Almonds, Barbary, &c. ..	65,597 "	1,938	..	..
Cocoa	228,901 No.	834	..	..
Unenumerated ..	45,408 lb.	470	48,957 lb.	407 19 6
Oakum	367 cwt.	490	..	..
Oars	172 No.	103	£103	20 12 0
"	1,932 "	320	..	..
Oils—				
Castor, bulk	4,252 galls.	7,212	71,655 galls.	1,791 7 9
"	6,500 "	613	..	..
Castor, bottled ..	2,321 doz. pts	665	£545	81 15 2
Cod liver	16,088 galls.	2,690	..	..
Colza	17,568 "	2,096	15,270 galls.	381 15 0
"	8,300 "	1,019	..	..
Fish, penguin, and seal ..	30,879 "	2,186	..	..
Linseed	177,932 "	19,038	177,543 galls.	4,438 11 8

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Oils—*continued.*		£		£ s. d.
Linseed	8,822 galls.	950	..	..
Mineral, kerosene ..	1,755,116 „	66,909	1,739,482 galls.	43,487 1 3
Mineral, other kinds ..	51,326 „	3,787	52,581 „	1,314 10 8
„ ..	26,625 „	1,687	..	..
Neatsfoot	3,684 „	401	3,683 galls.	92 1 6
Olive, bulk	11,983 „	1,894	10,130 „	253 4 9
„	50 „	18	..	..
Olive, bottled	3,727 doz. pts	1,384	£1,299	194 17 1
Whale	3,566 galls.	270	..	..
Unenumerated, bulk ..	113,499 „	10,511	113,023 galls.	2,825 11 6
„ ..	18,549 „	1,352	..	..
Unenumerated, bottled..	7,154 doz. pts	2,736	£2,866	429 19 4
Unenumerated ..	11,554 galls.	720	..	..
Oilmen's stores	..	5,928	£6,049	1,209 17 4
Onions	6,095 cwt.	2,474	6,017 cwt.	300 16 8
Opium	2,135 lb.	3,592	2,704 lb.	5,408 15 0
Paints and colours—				
Ground in oil	24,706 cwt.	27,579	24,315 cwt.	3,039 6 10
„	124 „	117	..	
Mixed, ready for use ..	2,674 „	6,314	2,689 cwt.	672 5 5
Unenumerated ..	6,998 „	7,494	..	..
Paper—				
Bags, coarse	31 „	18	31 cwt.	11 15 0
Bags, other kinds ..	1,707 „	3,347	£3,929	982 6 10
Butter-paper	1,514 „	3,466	..	..
Hangings	730,217 pieces	17,896	£17,943	2,691 8 4
Printing	69,565 cwt.	72,529	..	..
Wrapping	3,030 „	3,469	3,253 cwt.	813 4 4
„	64 „	155	..	..
Writing	8,151 „	15,877	..	..
Unenumerated ..	746 „	838	..	..
Peas, split	941 cwt.	415	911 cwt.	91 1 5
Peel, candied and dried. ..	7,483 lb.	159	7,404 lb.	92 10 11
Perfumery—				
Perfumed spirits, &c. ..	1,102 gallons	4,095	..	..
Ditto	..	..	554 gallons	581 18 0
Ditto	..	..	665 „	998 4 1
Toilet preparations ..	..	4,467	£4,144	1,035 19 7
Unenumerated ..	..	906	£908	227 2 6
„ ..	..	166	..	..
Photographic goods (including chemicals) ..	..	3,023	£3,014	602 14 8
Ditto	..	23	..	..
Copper, glass, and zinc plates for photo-lithographic work ..	..	1,802	..	..
Photographic cameras and lenses	..	3,827	..	..
Sensitised surfaces for photographic purposes	..	6,511	..	..
Pickles	2,542 gallons	507	3,732 gallons	559 15 0
Pictures, paintings, drawings, engravings, and photographs.. ..	..	2,714	£2,624	524 17 6

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Pictures, &c.—*continued* ..	..	100	..	..
Family portraits ..	..	28	..	..
For museums, &c. ..	..	70	..	..
Picture-frames and mounts	..	656	£569	113 15 2
Pitch	760 cwt.	376	..	..
Plants, shrubs, &c. ..	..	2,829	..	..
Plaster of Paris	3,132 cwt.	722	..	..
Plate and plated ware ..	..	22,078	£21,291	4,258 3 0
Portmanteaux and travelling bags	..	3,334	£3,334	833 9 0
Leather bags and leather-cloth bags	..	59	£59	11 16 0
Potatoes	42 tons	148	£148	29 12 0
"	14 "	54	..	..
Printing materials—				
Stereotypes and matrices	..	31	£31	7 15 0
Type and materials ..	..	10,440	..	..
Provisions n.o.e... ..	..	3,405	£3,015	602 19 11
"	..	12	..	..
Pumps	..	2,821	£2,794	558 16 7
Putty	3,442 cwt.	1,500	3,415 cwt.	341 9 7
Quicksilver	7,903 lb.	771	..	..
Rags	81 tons	364	..	..
Railway plant—				
Locomotives	1 No.	851	..	..
Unenumerated ..	..	14	£14	2 16 0
"	..	2,197	..	..
Resin	10,728 cwt.	3,280	..	..
Rice	61,240 cwt.	34,309	..	..
"	..	..	51,948 cwt.	15,584 8 10
"	..	..	7,555 "	755 11 0
Rugs, all kinds	..	9,713	£9,614 " ..	1,922 17 1
"	..	36	..	..
Saccharine	947 oz.	150	899 oz.	67 8 0
Saddlery and harness (including whips) ..	..	20,665	£20,915	4,183 1 1
Ditto	..	7	.. ..	..
Harness-oil, composition, and leather-dressing ..	..	998	£1,008	201 12 0
Saddlers' ironmongery and materials ..	..	12,911	..	..
Collar-check	..	2,116	.. ..	..
Salt	10,187 tons	22,741	10,339 tons	5,169 14 3
Rock	463 "	1,028	..	..
Saltpetre	49 "	1,233	..	..
Sashes, glazed	1 pair	2	1 pair	0 4 0
Sauces	8,979 galls.	5,792	9,673 galls.	1,934 10 10
Sausage-skins	149,153 lb.	6,587	109,945 lb. ..	1,374 6 3
Seeds—				
Grass and clover ..	15,905 cwt.	38,201	..	..
Unenumerated ..	..	13,266	.. ..	..
Shale	347 tons	982	..	..
Shells	782 cwt.	5,751	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Ship-chandlery, n.o.e. ..	..	2,224	..	..
Silks, &c.	..	69,742	£69,761	17 440 6 9
For flour-dressing ..	..	184	..	..
Silver	916 oz.	118	..	..
Skins and pelts—				
Fur-skins	120 No.	6	..	..
Kangaroo and wallabi skins	677 „	30	..	..
Unenumerated ..	1,594 „	159	..	..
Slates, roofing	186,840 „	1,527	..	..
Soap—				
Common	31 cwt.	53	29 cwt.	7 3 9
„	20 „	17	..	..
Powder, extract of soap, &c.	..	3,902	£3,805	761 1 0
N.o.e.	591,530 lb.	14,452	£14,959	3,739 16 4
Specie—				
Copper	..	1,291	..	..
Gold	..	97,600	..	..
Silver	..	3,050	..	..
Specimens illustrative of natural science ..	..	246	..	..
Spices—				
Ground	16,773 lb.	594	17,750 lb.	295 16 6
Unground	348,136 „	7,096	334,430 „	2,786 18 5
Spirits—				
Bitters, cordials, and liqueurs	1,230 galls.	1,369	1,239 galls.	991 5 1
Brandy	68,825 „	29,610	70,959 „	56,767 3 1
Geneva and gin, unsweetened	63,055 „	14,187	52,076 „	41,661 1 6
Methylated	1,632 „	208	1,736 „	86 15 9
„	5 „	1	..	..
Rum	14,372 „	2,714	18,164 galls.	14,531 8 3
Rum, used in the manufacture of tobacco ..	..	..	23 „	..
Sweetened, &c. ..	8,204 galls.	2,255	7,089 „	5,671 6 1
Whisky	320,938 „	107,304	298,114 „	238,491 4 9
Unenumerated ..	883 „	389	884 „	707 9 3
„ ..	10 „	2	..	..
Spirits of wine	30,463 „	2,609	2,386 galls.	1,908 19 2
Methylated, in bond ..	..	..	15,336 „	383 8 3
Used in manufacture of perfumery and essences, in bond	..	..	13,518 „	..
Sponges	519 lb.	133	£133	26 12 0
„	134 „	75	..	..
Starch	763,882 „	9,012	767,212 lb.	6,393 8 8
Stationery—				
Manufactured	..	32,661	£32,841	8,210 3 4
„	..	1,251	..	..
Unenumerated ..	..	27,937	£28,071	5,614 4 3
„	..	5,161	..	..
„	..	30	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Stationery—*continued.*		£		£ s. d.
Apparatus and appliances for teaching purposes	..	4,690	..	..
Bookbinders' materials ..	..	4,972	..	..
Materials for cardboard-boxes	..	4,734	..	..
Unenumerated ..	..	5,192	..	..
Stearine	128,989 lb.	2,462	132,308 lb.	826 18 6
Stone, building	52 tons	137	..	..
Granite, and other stone, dressed or polished, &c.	..	1,010	£1,069	267 6 0
Granite, unwrought ..	1 ton	2	£2	0 2 0
Unwrought	16 tons	27	..	..
Stones—Grind-, mill-, oil-, and whet-	..	1,600	..	..
Sugar—				
Raw	477,771 cwt.	243,178	700 lb.	1 9 2
Refined	212,902 "	173,865	65,449,042 "	136,352 3 5
Glucose	3,276 "	2,030	365,957 "	1,524 16 5
Molasses and treacle ..	14,370 "	3,051	1,945,878 "	4,053 18 3
" ..	11 "	10	..	..
Molasses and treacle, mixed with bone-black	..	..	449 cwt.	..
Sulphur	4,181 cwt.	1,378	..	..
Tanning materials, crude—				
Bark	4,696 tons	36,377	..	..
Other kinds	..	3,903	..	..
Tar	..	934	..	..
Tarpaulins, tents, &c. ..	..	315	£318	63 14 0
" ..	..	636	..	..
" ..	..	20	..	..
Tea	4,380,781 lb.	166,860	4,431,473 lb.	73,857 17 7
Textile piece-goods other than silk, cotton, linen, or woollen	..	9,180	£8,487	1,697 9 11
Articles made up from, other than apparel ..	..	7,515	£7,618	1,904 9 0
Timber—				
Laths and shingles ..	273,900 No.	216	213,833 No.	21 7 8
" ..	400 "	2	..	..
Logs	1,129 "	2,876	..	..
Logs, hewn	1,434,768 sup. ft.	12,834	..	..
Palings	347,507 No.	1,672	347,504 No.	347 10 1
"	2,000 "	11	..	..
Posts	11,190 "	343	11,190 No.	44 15 3
Rails	7,005 "	176	7,005 "	14 0 2
Sawn, undressed ..	2,489,086 sup. ft.	14,790	2,484,667 sup. ft.	2,484 13 4
" ..	536,074 "	4,436	..	..
Sawn, dressed	111,253 "	1,514	110,829 sup. ft.	221 13 2
"	7,967 sup. ft.	145	..	..
Unenumerated ..	..	843	..	..
Tin—				
Block	1,971 cwt.	6,331	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued*.

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Tin—*continued*.		£		£ s. d.
Foil	10,607 lb.	384	..	..
Sheet	40,022 cwt.	25,850	..	..
Tinware	..	8,031	£8,002	2,000 7 9
Tinsmiths' furnishings and fittings	..	1,106	..	..
Tobacco—				
Unmanufactured ..	28,829 lb.	1,612	45,162 lb.	4,516 5 0
Manufactured	1,458,964 „	103,558	1,345,557 „	235,472 7 11
Cigars	61,967 „	17,750	66,089 „	23,131 2 7
Cigarettes	110,685 „	26,796	..	..
„	..	..	39,816,000 No.	34,839 0 2
„	..	..	4,583 oz.	114 11 9
Snuff	2,010 „	189	2,009 lb.	703 3 0
Tobacco-pipes and cases ..	..	13,786	£13,704	3,425 19 3
Tools and implements—				
Axes and hatchets ..	..	8,332	..	..
Engineers' machine tools	..	3,649	..	..
Scythes	..	1,027	..	..
Sheep-shears	..	2,857	..	..
Spades, shovels, and forks	..	9,887	..	..
Unenumerated ..	..	44,386	..	..
Tramway plant	..	369	£367	73 8 0
Turpentine, driers, and terebene	80,131 galls.	8,213	..	..
Twine	255,159 lb.	8,872	£8,623	1,724 12 2
Nets and netting ..	..	588	£640	128 0 0
„	..	25	..	..
Twine, binder	456 cwt.	931	..	..
Unenumerated ..	..	132	..	..
Umbrellas and parasols ..	..	14,979	£15,058	3,011 12 2
Materials for	..	2,058	..	..
Varnish and gold-size ..	35,106 galls.	16,389	33,532 galls.	3,353 3 5
„ ..	3 „	3	..	..
Vegetables, fresh, dried, or preserved	..	403	359	71 16 1
Ditto	..	15	..	..
Vinegar	51,263 galls.	5,503	66,209 galls.	1,655 4 6
Watches	24,234 No.	16,925	£14,681	2,936 2 9
Watchmakers' materials ..	..	451	..	..
Wax—				
Paraffin, &c.	624,659 lb.	7,992	618,585 lb.	3,866 3 1
Beeswax	24 cwt.	105	..	..
Whiting and chalk ..	14,317 „	1,779	14,347 cwt.	717 6 10
Wine—				
Australian	36,763 galls.	12,006	39,242 galls.	9,810 10 9
Sparkling	6,399 „	11,863	6,441 „	2,898 6 6
Other kinds	48,088 „	17,010	53,794 „	16,138 1 11
Woodenware	..	5,960	£5,688	1,137 13 10
„	..	8,064	..	..
Mouldings	..	4,689	£4,591	688 13 0
Wool, greasy	10,738 lb.	273	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1896—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Woollen piece-goods ..	..	235,932	£236,457	47,291 8 0
" ..	..	45	..	..
Blankets	28,506 pairs	11,362	£11,392	2,278 7 11
"	29 "	18	..	..
Woolpacks	40,758 doz.	31,222	..	..
Wool-pockets	387 "	181	..	..
Yarns	..	7,223	£7,244	1,448 15 0
Yarn, coir, flax, and hemp	..	6,943	..	..
Zinc—				
Manufactures, tiles, ridging, &c.	..	140	£140	28 0 0
Manufactures n.o.e. ..	..	55	£55	13 15 0
Perforated sheet ..	411 cwt.	752	..	..
Plain sheet	5,404 "	5,635	..	..
Spelter	3,814 "	3,616	..	..
Minor articles required in the making-up of apparel	..	6,933	..	..
Articles and materials suitable only for and to be used solely in the fabrication of goods in the colony	..	11,505	..	..
Goods, miscellaneous—				
Manufactured ..	..	7,951	..	..
Unmanufactured ..	..	3,753	..	..
Parcels Post	..	33,944	..	7,090 8 3

The values of imports in each provincial district during 1896 were as under:—

	£
Auckland	1,989,643
Taranaki	47,076
Hawke's Bay	180,644
Wellington	1,679,427
Marlborough	9,865
Nelson	130,012
Westland	46,280
Canterbury	1,362,605
Otago	1,657,824

The value of imports by parcel-post (£33,944) must be added to the above figures in order to make up the total (including specie) of £7,137,320.

The value of the imports of New Zealand for the last five years are shown, arranged in groups according to the nature of the articles imported:—

IMPORTS FOR FIVE YEARS.

Group of Principal Articles imported.	1892.	1893.	1894.	1895.	1896.
	£	£	£	£	£
Apparel and slops ..	357,904	346,860	301,774	316,179	370,516
Boots and shoes ..	141,968	142,676	139,455	122,462	127,985
Cotton piece-goods ..	409,140	393,588	342,446	374,366	434,673
Drapery	354,944	337,065	294,800	288,995	336,839
Haberdashery ..	102,096	91,492	71,505	84,625	68,473
Hats and caps ..	64,958	62,234	46,785	54,193	58,310
Hosiery	78,209	72,281	59,237	62,237	82,984
Linen manufactures ..	53,443	48,142	43,851	48,029	57,325
Millinery	24,946	25,829	23,480	24,591	28,866
Silks	69,714	77,109	57,965	59,189	69,742
Woollens	214,521	211,770	178,668	187,782	254,580
Totals.. ..	1,871,843	1,809,046	1,559,966	1,622,648	1,890,293
Agricultural implements	6,184	4,958	3,942	4,599	6,894
Cutlery	20,148	19,903	16,913	15,658	17,384
Hardware and ironmongery	193,402	186,358	171,179	164,745	182,313
Iron rails and railway bolts, &c.	6,473	48,037	33,954	41,301	29,592
Iron, pig, wrought, wire, &c.	450,880	358,511	344,434	318,362	502,725
Steel and steel rails ..	25,225	14,484	10,164	12,152	
Machinery	183,013	182,639	156,199	131,843	251,905
Nails	31,475	24,773	27,968	25,965	32,304
Railway plant ..	17,537	6,904	8,843	5,687	3,062
Sewing-machines ..	22,084	29,405	21,797	22,166	24,641
Tools, artificers' ..	44,494	44,654	41,196	39,124	44,386
Totals ..	1,000,915	920,626	836,589	781,602	1,095,206
Sugar	408,400	301,308	460,071	389,609	422,134
Tea	139,876	164,360	136,986	173,343	166,860
Totals.. ..	548,276	465,668	597,057	562,952	588,994
Beer	57,183	46,317	39,393	42,676	35,123
Spirits*	164,798	184,625	153,560	164,166	160,648
Tobacco	121,664	125,253	124,757	123,843	149,905
Wine	48,012	51,084	40,412	41,109	40,879
Totals.. ..	391,657	407,279	358,122	371,794	386,555

* Includes methylated and perfumed spirits, and spirits of wine.

Group of Principal Articles imported.	1892.	1893.	1894.	1895.	1896.
	£	£	£	£	£
Paper	119,170	111,340	117,259	110,539	117,577
Printed books ..	107,422	108,281	105,597	101,958	111,344
Stationery	79,587	75,117	71,524	77,595	86,628
Totals.. ..	306,179	294,738	294,380	290,092	315,549
Bags and sacks ..	69,465	125,513	62,497	69,935	55,961
Coals	116,553	111,956	105,191	97,621	94,138
Fancy goods	78,825	85,907	71,257	71,273	89,072
Fruits (including fresh, preserved, bottled, dried)	121,368	146,580	133,829	125,250	145,016
Oils	119,533	105,377	111,654	134,913	128,138
Other imports (excluding specie)	2,117,930	2,021,589	1,859,635	1,987,873	2,246,457
Total Imports (excluding specie)	6,742,544	6,494,279	5,990,177	6,115,953	7,035,379
Specie imported ..	200,512	417,236	797,843	284,176	101,941
Total Imports ..	6,943,056	6,911,515	6,788,020	6,400,129	7,137,320

Customs Revenue.

The Customs revenue for the year 1896 amounted to £1,765,073, and the excise duties to £70,066. The revenue from Customs was £2 9s. 11d. per head of population excluding Maoris, and £2 7s. 3d. if they be included. In 1887 the Customs revenue was £2 2s. 11d. per head of European population, and from that time the proportion increased slowly year by year until 1892, when it reached £2 11s. 6d. per head. During the next two years there was a falling-off; but 1895 and 1896 show increases. Details for ten years are given:—

CUSTOMS REVENUE PER HEAD OF EUROPEAN POPULATION.

	£	s.	d.		£	s.	d.
1887	2	2	11	1892	2	11	6
1888	2	6	2	1893	2	10	4
1889	2	7	10	1894	2	6	4
1890	2	9	3	1895	2	6	9
1891	2	9	7	1896	2	9	11

The Customs and excise duties received during the last five years are shown in detail, also the rate of revenue per head of mean population, inclusive and exclusive of Maoris, for each year:—

—	1892.	1893.	1894.	1895.	1996.
CUSTOMS DUTIES.	£	£	£	£	£
Spirits	352,553	357,662	338,457	340,972	362,923
Wine	32,607	32,641	28,412	27,102	28,846
Ale, Beer, &c.	19,640	17,247	15,946	17,120	18,208
Cigars, Cigarettes, and Snuff	43,770	47,404	43,132	49,574	58,788
Tobacco	214,521	223,469	216,125	233,770	239,988
Tea	102,209	102,096	103,161	94,716	73,858
Coffee, Cocoa, &c... ..	6,820	7,021	6,145	5,677	5,495
Sugar and Molasses ..	121,711	124,870	133,107	137,493	141,933
Opium	8,159	8,046	7,061	5,969	5,409
Other Goods by Weight ..	158,356	159,173	155,557	160,482	172,733
" ad valorem ..	499,506	492,236	429,594	447,749	562,961
Other Duties	89,283	88,539	90,430	93,884	86,841
Parcels Post	4,929	5,279	5,340	5,462	7,090
Totals, Customs Duties	1,654,064	1,665,683	1,572,467	1,619,970	1,765,073
EXCISE DUTIES.					
Tinctures—New Zealand ..	..	..	..	53	200
Cigars, Cigarettes, and Snuff —New-Zealand-manufactured	721	1,927	1,544	879	916
Tobacco — New-Zealand-manufactured	1,887	1,708	2,239	1,431	1,663
Beer—New Zealand ..	59,409	60,920	60,092	61,705	67,287
Totals, Excise Duties ..	62,017	64,555	63,875	64,068	70,066
Revenue from Customs Duties per head of mean population (excluding Maoris)	£ s. d. 2 11 6	£ s. d. 2 10 4	£ s. d. 2 6 4	£ s. d. 2 6 9	£ s. d. 2 9 11
Ditto (including Maoris) ..	2 8 4	2 7 4	2 3 7	2 4 2	2 7 3
Revenue from Excise Duties per head of mean population (excluding Maoris) ..	0 1 11·2	0 1 11·4	0 1 10·6	0 1 10·2	0 1 11·8
Ditto (including Maoris) ..	0 1 9·8	0 1 10·0	0 1 9·3	0 1 8·9	0 1 10·5

In 1895 a new tariff was passed, which has been given in full in this book. The rates of duty levied during the year included 16s. per gallon on spirits (perfumed, 30s. after 1st February); 7s. per pound on cigars and snuff; 17s. 6d. per 1,000 of 2½lb. and under, and 6d. per ounce weight over 2½lb. per 1,000, on cigarettes; 3s. 6d. per pound on manufactured and 2s. on unmanufactured tobacco. Sparkling wine is charged 9s. a gallon; Australian, 5s.; other kinds, 6s.; ale and beer, 2s. The duty on tea is 4d. the pound; on cocoa, chocolate, and chicory, 3d.; raw coffee, 2d.; roasted, 5d. Sugar, molasses, and treacle pay ½d., and glucose 1d. per pound. Opium is charged 40s. per pound. The remainder of the Customs revenue, with small exception, is made

up of charges on goods by weight, *ad valorem* duties, ranging from 5 to 40 per cent., and receipts from the foreign parcels post. There was also an excise duty of 1s. per pound on tobacco, 1s. 6d. per pound on cigars, cigarettes, and snuff, 3d. per gallon on beer, 9d. per pound on tinctures, &c., manufactured in the colony, containing more than 50 per cent. of proof spirit, and 3d. per pound when less than 50 per cent.

By "The Tobacco Excise Duties Act, 1896," the excise duty on cigarettes made in the colony is now (from the 31st December, 1896) 2s. 6d. per pound on machine-made and 1s. per pound on hand-made cigarettes.

"The Tobacco Act Amendment Act, 1896," enacts that all packages of manufactured tobacco shall be labelled before leaving the manufactory, and provides for the issue of warrants to use cutting-machines for cutting duty-paid manufactured tobacco for sale (or to be used in the manufacture of cigarettes by hand), and to manufacture cigarettes by hand, under certain conditions.

Exports.

The value of all the exports in 1896 was £9,321,105; the value of New Zealand produce exported, £9,177,336: being at the rate of £12 19s. 8d. per head of population. The following table gives the values of the several exports of New Zealand produce in each of the past eleven years:—

EXPORTS OF NEW ZEALAND PRODUCE.

Year	Wool.	Gold.	Frozen Meat.	Butter and Cheese.	Agricultural Produce.	Manufactures	Other N.Z. Produce.	Total.
	£	£	£	£	£	£	£	£
1886	3,072,971	934,648	427,193	151,194	688,804	109,656	997,216	6,386,682
1887	3,321,074	747,878	455,870	109,383	588,022	124,382	1,204,372	6,551,081
1888	3,115,098	914,809	628,800	197,170	905,907	233,383	1,260,461	7,255,128
1889	3,976,375	785,490	783,374	213,945	1,424,297	569,880	1,288,647	9,042,008
1890	4,150,599	751,360	1,087,617	207,687	1,289,864	547,947	1,393,687	9,428,761
1891	4,129,686	1,007,172	1,194,724	235,933	894,467	420,357	1,516,755	9,400,094
1892	4,313,307	951,963	1,033,377	318,204	1,035,637	367,677	1,345,703	9,365,868
1893	3,774,738	915,921	1,085,167	354,271	716,546	345,636	1,365,164	8,557,443
1894	4,827,016	887,865	1,194,545	366,483	317,655	224,958	1,266,626	9,085,148
1895	3,662,131	1,162,181	1,262,711	378,510	326,029	188,702	1,409,889	8,390,153
1896	4,391,848	1,041,428	1,251,993	411,882	572,355	198,081	1,309,749	9,177,336

The most important items of export under the heading "Other New Zealand Produce" are coal, silver, minerals, fish, oysters, fungus, kauri-gum, timber, bacon, salted and preserved meats, tallow, sheep- and rabbit-skins, hides, sausage-skins, and live stock. The aggregate value of these in 1896 was £1,269,421.

The above table shows that the value of the exports of New Zealand produce fell from £9,428,761 in 1890 to £9,400,094 in 1891,

and again from £9,365,868 in 1892 to £8,557,443 in 1893, rose in 1894 to £9,085,148, fell in 1895 to £8,390,153, and rose in 1896 to £9,177,336, an increase of £787,183 on the figures for the previous year.

The values of each article of export for the calendar year 1896 were :—

	£
The Mine.	
Coal	71,984
Gold	1,041,428
Silver and minerals	12,959
Total	1,126,371
The Fisheries.	
Fish	14,372
Oysters	2,234
Other	2,042
Total	18,648
The Forest.	
Fungus	8,452
Kauri-gum	431,323
Timber—	
Sawn and hewn	133,511
Other	4,123
Total	577,409
Animals and Produce.	
Bacon and hams	18,367
Beef and pork (salted)	6,119
Butter	281,716
Cheese	130,166
Hides	5,280
Live-stock—	
Cattle	1,663
Horses	9,295
Sheep	5,751
Pigs and other live-stock	995
Preserved meats	75,661
Frozen meat	1,251,993
Rabbit-skins	45,317
Sausage-skins	65,599
Sheepskins and pelts	164,193
Tallow	208,821
Wool	4,391,848
Other	6,561
Total	6,669,345

	£
Agricultural Products.	
Bran and sharps	17,958
Chaff	15,149
Flour	62,208
Grain—	
Barley	6,109
Beans and peas	11,010
Maize	1,977
Malt	28,043
Oats	220,070
Wheat	78,988
Hops	9,340
Oatmeal	12,893
Potatoes	11,004
Seeds (grass and clover)	81,175
Other	16,431
Total	572,355
Manufactures.	
Ale and beer	1,660
Apparel	3,983
Cordage	1,049
Leather	88,988
Phormium (New Zealand hemp)	32,985
Soap	2,266
Woollen manufactures	11,635
Other manufactures	55,515
Total	198,081
Miscellaneous	15,127
Total exports (colonial produce and manufactures)	9,177,336
Specie	21,198
Other exports (British and foreign)	122,571
Total exports	£9,321,105

The exports for any two calendar years may vary considerably, according as the bulk of a season's wool-clip is shipped at the close of one year or at the beginning of the next; and for comparison of quantities it is well to take the figures for two successive years ending 31st March, in order to include the whole of one clip in each

year. The succeeding figures are for the years ended 31st March, 1896, and 31st March, 1897. The quantities exported are shown, with the increase or decrease on each item :—

QUANTITIES OF THE PRINCIPAL ARTICLES OF NEW ZEALAND PRODUCE EXPORTED.

Items.		Year 1895-96.	Year 1896-97.	Increase in 1896-97.	Decrease in 1896-97.
The Mine :—					
Coal	Tons	83,412	80,319	..	3,093
Gold	Oz.	302,681	256,913	..	45,768
Silver	"	83,892	112,832	28,940	..
Minerals	Tons	636	1,307	671	..
The Fisheries :—					
Fish	Cwt.	7,372	9,842	2,470	..
Oysters	Doz.	567,615	355,880	..	211,735
The Forest :—					
Fungus	Cwt.	4,994	4,606	..	388
Gum (kauri)	Tons	7,165	7,278	113	..
Timber (sawn and hewn)	Ft.	40,384,956	33,004,341	..	7,380,615
Animals and Produce :—					
Bacon and hams	Cwt.	2,034	19,001	16,967	..
Beef (salted)	"	5,231	5,686	455	..
Butter	"	60,200	75,291	15,091	..
Cheese	"	71,477	71,678	201	..
Hides	No.	8,902	6,546	..	2,356
Live-stock	"	15,563	3,914	..	11,649
Meat (preserved)	Cwt.	39,604	46,302	6,698	..
" (frozen)	"	1,171,521	1,069,719	..	101,802
Sausage-skins	"	8,474	9,433	959	..
Skins (rabbit)	No.	13,884,344	10,293,133	..	3,591,211
" (sheep)	"	3,247,250	3,097,032	..	150,218
Tallow	Tons	12,813	12,229	..	584
Wool	Lb.	128,284,720	127,766,715	..	518,005
Agricultural Products :—					
Bran and sharps	Tons	2,692	4,741	2,049	..
Chaff	"	1,080	4,154	3,074	..
Flour	"	947	9,082	8,135	..
Grain (barley)	Bush.	41,642	28,369	..	13,273
" (beans and peas)	"	190,443	48,487	..	141,956
" (malt)	"	85,480	140,135	54,655	..
" (oats)	"	1,900,537	2,069,518	168,981	..
" (wheat)	"	72,380	428,029	355,649	..
" (maize)	"	58,684	499	..	58,185
Hops	Cwt.	3,005	1,610	..	1,395
Meal (oat)	"	19,672	30,500	10,828	..
Potatoes	Tons	4,623	2,909	..	1,714
Seeds (grass and clover)	Cwt.	38,516	35,132	..	3,384
Manufactures :—					
Leather	Cwt.	21,577	17,775	..	3,802
Phormium	Tons	2,457	2,830	373	..

Some of the most important proportional increases and decreases are the following :—

INCREASES.

Export of		Rate of Increase per Cent. in 1896-97.	Export of		Rate of Increase per Cent. in 1896-97.
Flour ..	Tons ..	859·03	Fish ..	Cwt. ..	33·51
Bacon and hams	Cwt. ..	834·17	Butter ..	" ..	25·07
Wheat ..	Bush. ..	492·74	Meat (preserved)	" ..	16·91
Chaff ..	Tons ..	284·63	Phormium ..	Tons ..	15·18
Minerals ..	" ..	105·50	Sausage-skins	Cwt. ..	11·32
Bran and sharps	" ..	76·11	Oats	Bush. ..	8·89
Malt ..	Bush. ..	63·94	Beef (salted) ..	Cwt. ..	8·70
Meal (oat) ..	Centals	55·04	Gum (kauri) ..	Tons ..	1·58
Silver ..	Oz. ..	34·50	Cheese ..	Cwt. ..	0·28

DECREASES.

Export of		Rate of Decrease per Cent. in 1896-97.	Export of		Rate of Decrease per Cent. in 1896-97.
Maize ..	Bush. ..	99·15	Leather ..	Cwt. ..	17·62
Live Stock ..	No. ..	74·85	Gold ..	Oz. ..	15·12
Beans and Peas	Bush. ..	74·54	Seeds ..	Cwt. ..	8·79
Hops ..	Cwt. ..	46·42	Frozen meat ..	" ..	8·69
Oysters ..	Doz. ..	37·30	Fungus ..	" ..	7·77
Potatoes ..	Tons ..	37·08	Sheepskins ..	No. ..	4·63
Barley ..	Bush. ..	31·87	Tallow ..	Tons ..	4·56
Hides ..	No. ..	26·47	Coal ..	" ..	3·71
Rabbitskins ..	" ..	25·15	Wool ..	Lb. ..	0·40
Timber ..	Ft. ..	18·28			

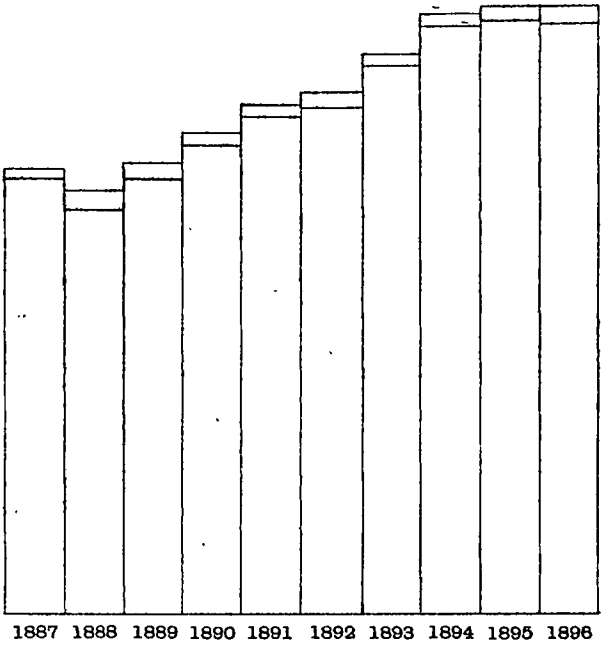
The next table shows the declared values of the chief articles exported in the years ending 31st March, 1896 and 1897, with increases and decreases for 1896–97. Unlike the calendar years, the comparison of totals shows decrease on the whole value.

	Year 1895-96.	Year 1896-97.	Increase in 1896-97.	Decrease in 1896-97.
THE MINE.	£	£	£	£
Coal	79,922	72,477	..	7,445
Gold	1,196,059	1,015,741	..	180,318
Silver and minerals	13,940	17,406	3,466	..
Total	1,289,921	1,105,624	..	184,297
THE FISHERIES.				
Fish	8,855	17,031	8,176	..
Oysters	2,458	2,283	..	175
Other	2,764	1,951	..	813
Total	14,077	21,265	7,188	..
THE FOREST.				
Fungus	7,706	7,292	..	414
Kauri-gum	421,446	433,554	12,108	..
Timber—				
Sawn and hewn	147,004	128,124	..	18,880
Other	6,172	3,301	..	2,871
Total	582,328	572,271	..	10,057

Animals and Produce.	Year 1895-96. £	Year 1896-97. £	Increase in 1896-97. £	Decrease in 1896-97. £
Bacon and hams	6,556	20,326	13,770	..
Beef (salted)	5,420	6,043	623	..
Butter	241,647	297,469	55,822	..
Cheese	132,039	135,736	3,697	..
Hides	7,391	5,579	..	1,812
Live-stock	37,119	17,988	..	19,131
Preserved meats	69,908	78,163	8,255	..
Frozen meat	1,318,317	1,203,807	..	114,510
Rabbit-skins	75,679	44,827	..	30,852
Sausage-skins	45,706	62,461	16,755	..
Sheepskins and pelts	183,273	162,899	..	20,374
Tallow	253,717	218,935	..	34,782
Wool	4,299,407	4,245,147	..	54,260
Other	9,853	6,141	..	3,712
Total	6,686,032	6,505,521	..	180,511
Agricultural Products.				
Bran and sharps	9,456	15,790	6,334	..
Chaff	3,301	12,708	9,407	..
Flour	7,152	90,352	83,200	..
Grain—				
Barley	5,826	3,981	..	1,845
Beans and peas	25,515	9,453	..	16,062
Maize	7,625	72	..	7,553
Malt	20,196	32,463	12,267	..
Oats	166,128	201,059	34,931	..
Wheat	12,716	76,135	63,419	..
Hops	10,397	7,724	..	2,673
Oatmeal	8,863	14,284	5,421	..
Potatoes	11,046	8,888	..	2,158
Seeds (grass and clover)	70,486	69,368	..	1,118
Other	11,870	15,436	3,566	..
Total	370,577	557,713	187,136	..
Manufactures.				
Apparel	3,493	4,621	1,128	..
Leather	107,151	85,400	..	21,751
Phormium (New Zealand hemp)	27,508	31,732	4,224	..
Woollen manufactures	14,658	13,223	..	1,435
Other manufactures	42,404	60,948	18,544	..
Total	195,214	195,924	710	..
Miscellaneous	20,682	13,047	..	7,635
Total exports (colonial produce and manufactures)	9,158,831	8,971,365	..	187,466
Specie	33,468	22,041	..	11,427
Other exports (British and foreign)	126,398	125,721	..	677
Total exports	£9,318,697	£9,119,127	..	£199,570

The re-export trade of the colony would seem from the sub-

Production of Wool for Ten Years, 1887 to 1896.



Year.	Quantity exported.	Quantity purchased for Consumption by Local Mills.	Total Annual Production.
	Lbs.	Lbs.	Lbs.
1887	95,914,181	2,001,155	97,915,336
1888	89,276,268	4,079,563	93,355,831
1889	95,618,507	3,556,004	99,174,511
1890	102,522,185	2,979,293	105,501,478
1891	108,619,473	2,918,073	111,537,546
1892	110,860,050	3,388,954	114,249,004
1893	119,643,874	2,629,855	122,273,729
1894	128,480,457	2,476,155	130,956,612
1895	129,333,769	3,299,132	132,632,901
1896	128,309,673	3,989,934	132,299,607

REFERENCE.

Wool Exported..... *Wool Locally used*.....

joined figures to have been almost stationary for the last ten years:—

EXPORTS OF BRITISH, FOREIGN, AND OTHER COLONIAL PRODUCE (EXCLUDING SPECIE).

	£		£
1887	129,691	1892	125,052
1888	148,078	1893	123,402
1889	139,347	1894	136,402
1890	140,555	1895	127,966
1891	160,765	1896	122,571

With these sums may be contrasted the re-export trade of New South Wales—a colony having less than double the population of New Zealand—which, exclusive of specie, amounted in 1895 to £3,408,295.

Wool exported and produced.

The quantity of wool exported in 1896 was 129,151,624 lb., valued at £4,391,848. The annual production, however, can be better estimated by taking the exports for the twelve months immediately preceding the commencement of shearing, and adding thereto the quantity used in the colony for manufacturing purposes.

The following shows the produce for each of the last ten years ending with the 30th September :—

Year ending 30th September.	Quantity exported.	Quantity purchased by Local Mills.	Total Annual Produce.
	Lb.	Lb.	Lb.
1887	95,914,181	2,001,155	97,915,336
1888	89,276,268	4,079,563	93,355,831
1889	95,618,507	3,556,004	99,174,511
1890	102,522,185	2,979,293	105,501,478
1891	108,619,473	2,918,073	111,537,546
1892	110,860,050	3,388,954	114,249,004
1893	119,643,874	2,629,855	122,273,729
1894	128,480,457	2,476,155	130,956,612
1895	129,333,769	3,299,132	132,632,901
1896	128,309,673	3,989,934	132,299,607

From these figures it appears that the wool-clip has increased by 35·12 per cent. within the last ten years.

To arrive at a perfectly correct estimate of the increase in wool production it would be necessary to take into consideration the proportion of greasy, scoured, and washed wool exported each year, the washing process of course greatly reducing the weight. The percentages of greasy, scoured, and washed wool to the total quantities exported during the last five years are :—

Years	Greasy. Per Cent.	Scoured. Per Cent.	Washed. Per Cent.
1892	81·87	13·51	4·62
1893	77·65	14·86	7·49
1894	81·27	11·13	7·60
1895	78·42	14·81	11·77
1896	77·89	20·74	1·37

The increase in the wool-production is of course mainly due to the greater number of sheep—namely, 19,138,493 in April, 1896, against 15,155,626 in May, 1887. It will be apparent from the following table that the tendency of increase is towards the multiplication of the smaller flocks, whose owners are better able to cope with the rabbit difficulty than the large runholders:—

NUMBER OF FLOCKS, 1887 TO 1896.

Size of Flocks.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Under 500 ..	6,247	6,579	7,063	7,662	8,272	8,822	9,629	10,314	11,336	12,028
500 and under 1,000	1,139	1,182	1,381	1,528	1,691	2,033	2,239	2,427	2,497	2,605
1,000 and under 2,000	723	794	826	854	969	1,193	1,315	1,409	1,405	1,460
2,000 and under 5,000	531	524	597	586	666	761	836	933	904	892
5,000 and under 10,000	289	287	279	283	287	314	341	345	341	340
10,000 and under 20,000	221	213	239	236	239	231	241	230	232	231
20,000 and upwards	166	166	152	160	169	176	178	179	183	147
Total ..	9,316	9,745	10,537	11,309	12,293	13,530	14,779	15,837	16,898	17,703

The wool production and distribution for the world is given from the Victorian Year-book, 1894:—

Countries.	Wool produced, 1891.*	Countries.	Wool produced, 1891.*
Europe—		Australasia	661,164,000
United Kingdom ..	147,475,000	Argentine Republic ..	376,700,000
France	124,803,000	Cape Colony and Natal	128,682,000
Germany	54,894,000	Uruguay	42,000,000
Belgium	4,409,000	East Indies	72,000,000
Austria-Hungary ..	54,301,000	Russia (Asiatic) ..	66,000,000
Italy	21,385,000	Mesopotamia	31,555,000
All other European countries ..	8,818,000	Turkey (Asiatic), Persia, Afghanistan, Beluchistan, and Thibet ..	20,500,000
Portugal	10,362,000	Peru	6,700,000
Sweden	3,307,000	Persia	3,470,000
Spain	66,138,000	Egypt	2,800,000
Russia and Poland ..	291,500,000	Brazil	1,875,000
		British North American Provinces	12,000,000
		United States.. ..	307,100,000
		All other countries ..	48,000,000
Total Europe ..	787,392,000	Total out of Europe	1,780,546,000
Grand total		.. 2,567,938,000 lb.	

*The figures for this Table, excepting those for Australasia, have been compiled from information contained in a report issued by the Department of Agriculture, Washington, United States, 1893.

The centres of wool-production have gradually shifted, as will be seen by the next table,* showing the percentage of the total imports into the United Kingdom at different periods:—

—	1844.	1850.	1860.	1870.	1880.	1890.
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
British Possessions—						
Australasia	26·8	52·5	39·9	66·5	64·9	66·2
South Africa ..	3·3	7·7	11·2	12·5	11·1	13·8
East Indies	4·2	4·7	13·6	4·2	6·3	5·4
Germany	33·2	12·3	12·4	1·7	1·5	1·1
South America ..	5·7	7·1	6·0	4·8	2·2	1·8

At the beginning of this century most of the merino wool required for manufacture in England was obtained from Spain. In 1820 (about) Spanish wool was superseded by merino wool from Saxony and Silesia; some twenty years later, Australasian wools began to take the place of the German merino, and have ever since held command of the market.

Frozen Meat exported.

Frozen meat now takes second place among the exports of New Zealand produce. In 1896, 1,103,362 cwt., valued at £1,251,993, were shipped in the colony. An account of the development of the industry was given in a special article in the Year-book, 1894. The total export for each year since the commencement of the trade has been:—

Year.	Lb.	Year.	Lb.
1882	1,707,328	1890	100,934,756
1883	9,853,200	1891	110,199,082
1884	28,445,228	1892	97,636,557
1885	33,204,976	1893	100,262,453
1886	38,758,160	1894	114,827,216
1887	45,035,984	1895	127,018,864
1888	61,857,376	1896	123,576,544
1889	73,564,064		

To ascertain the total value of the meat-export in 1896 it is necessary to take into consideration, with the amount of £1,251,993, value of frozen meat before stated, the value of preserved meats, £75,661; of salted beef and pork, £6,119; and of bacon and hams, £18,367.

Gold exported.

The amount of gold exported in 1896 was 263,694 oz.

The total quantity of gold entered for duty to the 31st December, 1896, which may be reckoned as approximately the amount obtained in the colony, was 13,313,907 oz., of the value of £52,392,430. For fuller information see "Mining" (*post*).

* Taken from "Wool and Manufactures of Wool," published by the Bureau of Statistics, Treasury Department, U.S.A.

Grain exported.

The value of the grain exported in 1896 was £346,197. The grain exports were made up as under:—

	Bushels.	£
Wheat	453,128	78,988
Oats	2,247,053	220,070
Barley	44,003	6,109
Malt	121,787	28,043
Maize	13,482	1,977
Peas and beans	62,373	11,010
Total quantity and value ..	2,941,821	£346,197

Butter and Cheese exported.

The quantity of butter exported amounted to 71,353 cwt., the declared value of which was £281,716. Of this quantity, 60,092 cwt., valued at £235,675, were shipped to the United Kingdom; 6,973 cwt., value £27,177, to New South Wales; 2,278 cwt., value £9,564, to Victoria; 725 cwt., value £3,348, to Western Australia; 421 cwt., value £1,877, to Fiji; and 372 cwt., value £1,855, to the South Seas.

The cheese exported was 71,372 cwt., of a declared value of £130,166, of which 58,692 cwt., valued at £103,853, were sent to the United Kingdom; 5,886 cwt., value £11,295, to New South Wales; 2,805 cwt., value £6,219, to Victoria; 2,511 cwt., value £5,530, to Western Australia; and 924 cwt., value £1,851, to the other Australian Colonies. While the quantity of butter exported—71,353 cwt.—in 1896 shows an increase of 319 per cent. on the quantity exported in 1887, the increase in the export of cheese during the ten-year period has been at the rate of 198 per cent.—71,372 cwt. in 1896, as against 23,913 cwt. in 1887.

The following statement shows the total quantity of butter and cheese exported in the past ten years, and the amount of either commodity sent to the United Kingdom:—

Year.	Total Export of Butter	Butter Exported to the United Kingdom.	Total Export of Cheese.	Cheese Exported to the United Kingdom.
	Cwt.	Cwt.	Cwt.	Cwt.
1887	17,018	6,937	23,913	9,900¾
1888	29,995	11,460	36,682	25,436¼
1889	37,955	21,099	26,558	7,633
1890	34,816	26,579	40,451	31,043
1891	39,430	28,989	89,770	29,565
1892	53,930	41,509	41,493	30,000
1893	58,149	52,363	46,201	41,567
1894	60,771	58,845	55,655	54,540
1895	57,964	55,194	76,743	73,969
1896	71,353	60,092	71,372	58,692

Phormium exported.

The export of phormium rose from 1,806 tons in 1895 to 2,968 tons in 1896, an increase of over 64 per cent. The market price continues low—averaging under £12 a ton—a state of things not encouraging to producers. Any considerable rise in the value of the fibre will doubtless result in temporarily increasing the output; but a large permanent development of this industry depends on the cultivation and careful selection of the plants used, and on improvements in the method of preparing the fibre. The largest quantity ever exported in a year was in 1890, when 21,158 tons were sent out of the colony.

Kauri-gum exported.

There were 7,126 tons of kauri-gum, valued at the rate of £60 10s. 6d. a ton, exported from the colony in 1896. In the year 1892 the export was as high as 8,705 tons. This gum is obtained only in the extreme northern part of the colony.

Exports from different Ports, &c.

The following table gives the values of the exports from each port in New Zealand for the last two years, arranged in order of magnitude for 1896:—

	1896.	1895.
	£	£
Lyttelton	1,694,850	1,635,331
Wellington	1,489,753	1,140,354
Auckland	1,276,035	1,302,075
Dunedin	1,052,285	1,047,489
Napier	849,131	870,422
Invercargill and Bluff	715,413	595,277
Timaru	539,387	474,858
Poverty Bay	317,970	136,539
Wanganui	288,565	241,053
Oamaru	247,198	300,893
Greymouth	228,200	257,065
New Plymouth and Waitara	204,612	108,846
Wairau and Picton	118,866	123,355
Kaipara	76,812	90,621
Hokitika	74,474	74,546
Nelson	59,530	63,727
Patea	42,361	40,347
Westport	37,940	40,736
Tauranga	2	1

The exports from the North and Middle Islands respectively, excluding "Parcels post," during the two years were as under:—

Year.	North Island.	Middle Island.	Proportion to Total Export.	
	£	£	North Island.	Middle Island.
1895	3,930,258	4,613,277	46·00	54·00
1896	4,545,241	4,768,143	48·80	51·20

Total Value of Trade.

The total value of the external trade in 1896 was £16,458,425; equivalent to £23 5s. 8d. per head of the population, excluding Maoris. The figures given further on show that the ratio of trade to

population has varied but little for several years. The highest record was in 1873, when the total trade per head reached £41 19s. 3d.; the imports, in consequence of the large expenditure of borrowed money, amounting at that time to £22 9s. 4d. per head, against £10 1s. 11d. in 1896.

It has been customary to leave out the Maoris in estimating the trade per head, for their industries and necessities swell the volume of trade in comparatively so slight a measure that the amount per head of European population can be more truly ascertained by omitting them altogether.

The values of imports and exports per head of population, excluding Maoris, were, for each of the past ten years, as follow:—

Year.	Imports per Head.	Exports per Head.	Total.
	£ s. d.	£ s. d.	£ s. d.
1887	10 9 5	11 10 3	21 19 8
1888	9 16 4	12 16 7	22 12 11
1889	10 5 6	15 4 5	25 9 11
1890	10 0 2	15 13 8	25 13 10
1891	10 6 6	15 3 10	25 10 4
1892	10 16 3	14 16 11	25 13 2
1893	10 9 0	13 11 9	24 0 9
1894	9 19 11	13 11 10	23 11 9
1895	9 4 10	12 7 0	21 11 10
1896	10 1 11	13 3 9	23 5 8

Trade with different Places.

The trade with the United Kingdom amounted to £12,256,457, comprising 74·46 per cent. of the total.

With the Australian Colonies and Tasmania, trade was done during 1896 to the value of £2,377,375; of which New South Wales claimed £1,203,840, and Victoria £835,729, made up as follows:—

EXPORTS FROM NEW ZEALAND.

	£
To New South Wales, 1896	641,175
„ Victoria, 1896	486,871

EXPORTS TO NEW ZEALAND.

	£
From New South Wales, 1896	562,665
„ Victoria, 1896	348,858

The latter amounts are the declared values of the imports into New Zealand from the colonies mentioned, not their export value as given in the New South Wales and Victorian returns.

Included in the exports to New Zealand from New South Wales is coal valued at £91,719, and gold coin, £47,500. The exports from Victoria to New Zealand include specie to the amount of £50,370.

Trade with Fiji showed an increase during the year. In 1890 it was £184,684; in 1891, £221,603; in 1892, £214,183; in 1893, £194,729; in 1894, £266,239; in 1895, £259,085; and in 1896 £267,476. The trade with the other Pacific Islands (including Norfolk Island) increased from £149,129 in 1895 to £160,542 in 1896.

Of the exports to the United States in 1896 the values of the principal New Zealand products were: Kauri-gum, £247,854; sheepskins, £732; sausage-skins, £10,020; rabbit-skins, £3,516; hides, £1,500; wool, £4,983; and phormium, £3,242.

The following table shows the value of the total trade with the United States for each of the past ten years:—

TRADE WITH THE UNITED STATES.

Year.	Imports from		Exports to		Total Trade.
	Atlantic Ports.	Pacific Ports.	Atlantic Ports.	Pacific Ports.	
	£	£	£	£	£
1887	263,377	35,359	241,388	168,092	708,216
1888	285,864	37,205	204,302	119,414	646,785
1889	307,156	35,280	242,778	98,584	683,798
1890	321,047	34,348	364,332	218,802	938,529
1891	317,913	43,882	395,386	119,822	877,003
1892	344,799	36,828	459,314	61,483	902,424
1893	345,743	33,635	430,842	65,706	875,926
1894	359,196	35,495	230,829	56,367	681,887
1895	351,823	42,410	298,536	18,103	710,872
1896	419,689	78,151	263,564	63,025	819,429

The trade with India and Ceylon reached a total of £224,140, against £235,272 in 1895. The imports—tea, rice, castor-oil, wool-packs, &c.—were reckoned at £221,459, leaving a balance of only £2,681 for exports.

The following table gives the value of the imports and exports of the Australasian Colonies for the year 1895:—

Colony.	Total Value of		Excess of Exports over Imports.
	Imports.	Exports.	
	£	£	£
Queensland	5,349,007	8,982,600	3,633,593
New South Wales	15,992,415	21,934,785	5,942,370
Victoria	12,472,344	14,547,732	2,075,388
South Australia	5,585,601	7,177,038	1,591,437
Western Australia	3,774,951	1,332,554	*
Tasmania	1,094,457	1,373,063	278,606
New Zealand (1896)	7,137,320	9,321,105	2,183,785

* Excess of imports over exports, £2,442,397.

In the preceding table is given the total trade inwards and outwards of each colony, counting twice over the value of goods produced in one colony and carried thence into another, and reckoning the same goods three times where they are imported from without into one colony and re-exported thence in the same year into another colony. But, in order to form a just idea of the trade of the Australasian Colonies as a whole, it is necessary to eliminate the intercolonial traffic altogether. From the following table the value of imports and exports exchanged between the various colonies has accordingly been excluded :—

EXTERNAL TRADE OF AUSTRALASIA.

Year.	Total Trade.	Imports.	Exports.	Excess of Imports.	Excess of Exports.
	£	£	£	£	£
1885 ..	72,220,444	41,136,038	31,084,406	10,051,632	..
1890 ..	75,143,818	38,451,160	36,692,658	1,758,502	..
1891 ..	84,565,778	41,325,033	43,240,745	..	1,915,712
1892 ..	75,325,933	34,529,501	40,796,432	..	6,266,931
1893 ..	67,788,738	27,925,990	39,862,748	..	11,936,758
1894 ..	65,192,202	26,063,630	39,128,572	..	13,064,942
1895 ..	67,624,317	27,425,725	40,198,592	..	12,772,867

It will be observed that in the year 1885 the excess of imports over exports for Australasia amounted to no less a sum than £10,051,632, and that five years later the excess of imports had fallen to £1,758,502. In 1891 the position was completely reversed, the exports exceeding the imports by £1,915,712. This excess increased to £6,266,931 in the following year (1892), to £13,064,942 in 1894, and was 12,772,867 in 1895.

The trade per head of the population in each of the colonies was :—

TRADE PER HEAD OF THE POPULATION IN 1895.

Colony.	Mean Population.	Imports.	Exports.	Total Trade.
		£ s. d.	£ s. d.	£ s. d.
Queensland	452,852	11 16 3	19 16 9	31 13 0
New South Wales	1,264,660	12 12 11	17 6 11	29 19 10
Victoria	1,180,040	10 11 5	12 6 7	22 18 0
South Australia	348,539	16 0 6	20 11 10	36 12 4
Western Australia	92,616	40 15 2	14 7 9	55 2 11
Tasmania	159,145	6 17 6	8 12 7	15 10 1
New Zealand (exclusive of Maoris) (1896)	706,846	10 1 11	13 3 9	23 5 8

The values of the exports of the Australian Colonies, more especially New South Wales, Victoria, and South Australia, are largely increased by the inclusion of articles the produce or manufacture of other colonies and countries.

The value of home productions or manufactures exported from each colony in 1895, and the rate per head of mean population, were as follow:—

Colony.	Home Produce exported. £	Per Head of Population. £ s. d.
Queensland	8,865,538 ..	19 11 7
New South Wales	16,436,210 ..	12 19 11
Victoria	11,615,493 ..	9 16 10
South Australia	3,537,751 ..	10 3 0
Western Australia	1,273,638 ..	13 15 0
Tasmania	1,305,160 ..	8 4 0
New Zealand (1896) ..	9,177,336 ..	12 19 8

The next table sets forth the amount of the trade of each of the above-named colonies with the United Kingdom in 1895:—

Colony.	Imports from the United Kingdom.	Exports to the United Kingdom.	Total Trade with the United Kingdom.
	£	£	£
Queensland	2,308,695	3,418,516	5,727,211
New South Wales	6,420,107	9,371,418	15,791,525
Victoria	4,759,546	8,068,121	12,827,667
South Australia	1,857,989	2,362,593	4,220,582
Western Australia	943,477	328,125	1,271,602
Tasmania	315,172	202,870	518,042
New Zealand (1896)	4,714,476	7,541,981	12,256,457

The statement appended shows the relative importance of the Australasian Colonies as a market for the productions of the United Kingdom:—

EXPORTS OF HOME PRODUCTIONS FROM THE UNITED KINGDOM, IN 1895, TO—

	£
United States	27,948,112
British India and Ceylon	25,686,029
Germany	20,580,866
Australasia	17,313,923
France	13,869,863
South Africa	10,581,478
Holland	7,374,125
Belgium	7,324,871

The exports to other countries did not amount to £7,000,000 in any one case.

The Australasian Colonies as a whole, with a population of 4,000,000, thus take the fourth place in importance as consumers of British produce, the exports thereto being more than two-thirds the value of similar exports to British India, with its 290,000,000 inhabitants.

SECTION V.—MANUFACTORIES AND WORKS.

Comparison of Total Results, 1896, 1891, 1886.

The results of the compilation of the special returns, relating to the various manufactories, works, &c., in the colony are compared with those shown for each of the two previous censuses in the statement given further on.

It must be remembered that, while all establishments or works are included which are of the nature of a factory, employing a number of persons, using some kind of machinery or plant, and probably steam- or water-power, the smaller establishments, where only a few persons may be engaged in making articles for retail disposal, or in repairs, as a general rule are kept out of the tables, which do not therefore give the value of all the work done in such matters as boot and shoe, general clothing, and furniture making, &c. But, though it is not easy to settle in all cases what to put in and what to leave out, it can be fairly well done, and quite sufficiently so to admit of reliable comparisons being given of different census results, so as to afford a just idea of the development or otherwise of the various branches of industry. The totals for the industries do not include mining and quarrying, which are dealt with separately.

The annual value of all manufactures increased between 1890 and 1895 by the sum of £775,523, while the increase for the previous quinquennium was as great as £2,062,458. But a moderate increase in money signifies, in respect of some items, a greater increase in production. The increases of quantity are stated in the special tables for the more important industries. It will be found that generally these increases are very satisfactory where the industries are such as meat-freezing, butter- and cheese-making, sawing of timber, and others which depend directly on work done upon the lands which are being developed; but in regard to some of the smaller manufacturing industries carried on in the towns the development is not always great, and in some cases these have retrograded.

The development of the butter- and cheese-making industry by way of factory work has helped greatly to make up the total increase shown since 1890; on the other hand, the decline of the flax- and grain-milling has operated unfavourably on the comparison for the years 1890 and 1895.

The great rise of the meat-freezing industry happened between 1885 and 1890, and this large increase, representing in money no less than £920,781, is probably the principal cause of the increase

for the whole of the manufactures being so much greater for the period 1885–90 than for 1890–95; but there is also, amongst many other causes, the fact that flax-milling was prosperous in 1890 (showing an increase over 1885 amounting to £214,207), but in 1895 in a state of the utmost depression, the value of the product of the mills being only £32,546, against £234,266 in 1890.

MANUFACTORIES AND WORKS, 1896, 1891, 1886.

	April, 1896.	April, 1891.	March, 1886.	Increase, 1891–96.	Increase, 1886–91.
	No.	No.	No.	No.	No.
Number of establishments*	2,459	2,254	1,946	205	308
Hands employed—					
Males	22,986	22,664	19,601	322	3,063
Females	4,403	2,969	2,494	1,434	475
Totals* ..	27,389	25,633	22,095	1,756	3,538
	Year 1895.	Year 1890.	Year 1885.	Increase, 1890–95.	Increase, 1885–90.
	£	£	£	£	£
Wages paid—					
To Males ..	1,776,076	1,705,641	†	70,435	†
„ Females ..	131,516	102,999	†	28,517	†
Totals* ..	1,907,592	1,808,640	†	98,952	†
	H.-p.	H.-p.	H.-p.	H.-p.	H.-p.
Horse-power	28,096	21,696	15,491	6,400	6,205
	£	£	£	£	£
Total approximate value of manufactures or produce*	9,549,360	8,773,837	6,711,379	775,523	2,062,458
Total approximate value of—					
Land	1,063,989	1,286,735	1,477,996	−222,746	−191,261
Buildings	1,743,073	1,483,902	1,446,082	259,171	37,820
Machinery and plant	2,988,955	2,491,189	2,172,852	497,766	318,337
Totals* ..	5,796,017	5,261,826	5,096,930	534,191	164,896

Under the heading "Hands employed," the males increased from 19,601 in 1886 to 22,986, or at the rate of nearly 18 per cent. in ten years; but the numerical increase was higher between 1886 and 1891 than from 1891 to 1896. On the other hand, the females employed increased in number between 1891 and 1896 far more than in the previous period, the increase for 1891–96 being at the rate of 48 per cent., and only 19 per cent. for 1886–91, or 77 per cent. for ten years.

* Omitting Government Railway Workshops and Government Printing Office.
† No information available.

No attempt was made in 1886 to obtain any account of the wages paid in the factories or large industrial works dealt with in the census returns. But in 1891 the total amount returned for the year 1890 was £1,808,640, and for 1895 the sum was £1,907,592, an increase of £98,952 in the annual payment, or 5·47 per cent.

The average annual amount of wages paid to male hands was £77·27 in 1895 and £75·26 in 1890. For females, £29·87 in 1895 against £34·69 at the previous census. The wages of males would seem to have been more than maintained. In regard to females, possibly a larger proportion of girl labour may have been employed in 1895 than in 1890, which would tend to lower the average rate for females of all ages.

The increase for the year 1896 over 1891 in the horse-power stated in the returns was 6,400, against 6,205 for 1891, over that for 1886.

The approximate value of the land used for purposes of the factories and industries retired from £1,477,996 in 1886 to £1,286,735 in 1891, and, further, to £1,063,989 in 1896. The value of the lands used for mining is not included in the above figures, and the value of Crown lands has been omitted throughout.

A very satisfactory development will be found in the value of the machinery and plant, from £2,172,852 in 1886 to £2,988,955 in 1896, being at the rate of 14·65 per cent. for the period 1886–91, and 19·98 per cent. for 1891–96. The value of the buildings also increased.

Industries in Provincial Districts.

The values of the manufactures for the provincial districts, as returned for 1895 and 1890, were respectively as follow :—

	Value of Manufactures, excluding Mines and Quarries.	
	1895.	1890.
Canterbury	2,629,822	2,056,412
Auckland	2,163,759	2,184,401
Otago	2,153,473	2,078,365
Wellington	1,475,517	1,412,465
Hawke's Bay	507,954	525,394
Taranaki	330,886	155,772
Nelson	142,109	146,020
Marlborough	89,748	161,714
Westland	56,092	53,294

Details of the Principal Industries.

The principal industries returned at the census of 1896, and particulars relating thereto, are given in detail in the following table. These industries are arranged in classes according to their nature :—

Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Manufactures or Produce (including Repairs) for the Year 1895.	Approximate Value of Land, Buildings, Machinery, and Plant.
		Males.	Females.	Total.	To Males.	To Females.	Total.			
					£	£	£	H.-p.	£	£
Meat-freezing and preserving works	30	1,908	52	1,960	175,521	304	175,825	7,326	1,615,219	697,436
Fish-curing and preserving works	27	74	1	75	3,229	13	3,242	..	10,292	9,729
Bacon-curing establishments	37	118	5	123	7,314	80	7,394	49	86,022	22,518
Butter and cheese factories*	170	548	28	576	39,716	441	40,157	1,531	501,274	234,006
Grain mills	90	419	..	419	40,890	..	40,890	2,333	874,656	355,847
Biscuit factories	17	345	80	425	18,801	1,355	20,156	134	118,979	58,866
Fruit-preserving and jam-making works	22	103	90	193	5,101	1,450	6,551	77	36,108	18,867
Sugar-boiling and confectionery works	12	39	30	69	2,253	561	2,814	21	33,235	8,925
Baking-powder factories	10	16	3	19	661	201	862	..	10,153	10,155
Breweries	85	465	..	465	57,327	..	57,327	441	336,734	230,416
Malthouses	31	95	..	95	9,398	..	9,398	59	82,096	37,504
Colonial wine factories	19	41	12	53	1,925	95	2,020	6	8,963	12,832
Aërated-water factories	132	330	17	347	21,184	261	21,445	216	98,609	89,344
Coffee and spice works	18	107	12	119	7,166	293	7,459	82	74,339	31,095
Sauce and pickle factories	24	44	24	68	1,835	622	2,457	57	13,417	11,909
Soap and candle works	22	187	3	190	16,882	21	16,903	252	152,298	58,826
Bone mills	15	46	..	46	2,069	..	2,069	220	12,246	9,449
Sausage-skin and violin-string factories	6	56	..	56	3,754	.	3,754	..	13,472	1,500
Boiling-down works	13	77	..	77	4,950	..	4,950	166	37,056	13,615

* In connection with these were 105 creameries, particulars relating to which are included.

DETAILS OF THE PRINCIPAL INDUSTRIES—*continued.*

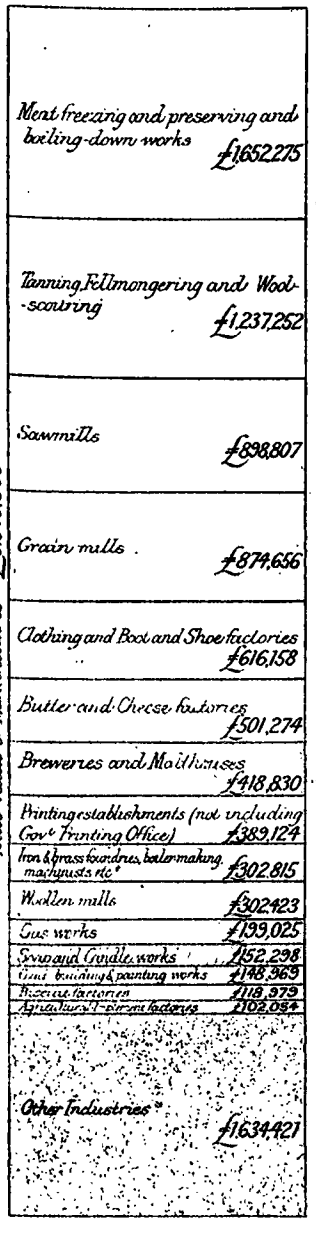
Nature of Industries.	Total Number of Industries.	Number of Hands employed.			Wages paid.			Amount of Power employed (Horse-power).	Value of all Manufactures or Produce (including Repairs) for the Year 1895.	Approximate Value of Land, Buildings, Machinery, and Plant.
		Males.	Females.	Total.	To Males.	To Females.	Total.			
					£	£	£	H.-p.	£	£
Cooperages	21	76	..	76	4,250	..	4,250	110	19,233	11,175
Sawmills, sash-and-door factories	299	4,055	4	4,059	323,223	..	323,223	6,409	898,807	586,422
Woodenware factories	19	81	..	81	4,147	..	4,147	124	18,276	13,427
Chaff-cutting establishments ..	52	212	..	212	7,847	..	7,847	344	78,497	42,378
Paper-bag and box factories ..	9	41	45	86	2,299	852	3,151	15	7,698	7,956
Gasworks	27	293	2	295	37,747	102	37,849	126	199,025	766,673
Lime and cement works ..	14	79	..	79	5,560	..	5,560	289	15,881	22,419
Brick, tile, and pottery works ..	108	454	1	455	28,179	50	28,229	519	66,140	76,585
Tinware factories	34	288	1	289	19,742	..	19,742	27	63,723	25,849
Iron and brass foundries, boiler-making, machinists, &c.* ..	90	1,639	3	1,642	129,699	64	129,763	1,093	302,815	252,135
Heel and toe-plate factories ..	4	9	..	9	460	..	460	19	1,850	2,371
Spouting and ridging factories ..	9	90	..	90	5,758	..	5,758	24	23,762	19,729
Lead-headed nail works	7	10	2	12	464	30	494	5	2,834	2,325
Printing establishments† ..	154	2,123	228	2,351	204,165	12,137	216,302	532	389,124	396,915
Musical instrument factories ..	5	15	..	15	1,030	..	1,030	4	2,282	6,070
Basket and perambulator factories	17	67	9	76	3,380	299	3,679	5	11,920	10,850

Agricultural implement factories	34	581	..	581	44,581	..	44,581	217	102,054	71,267
Brush and broom factories ..	15	62	30	92	3,937	793	4,730	20	23,363	9,005
Coach-building and painting works	116	807	..	807	57,377	..	57,377	119	148,969	105,802
Cycle factories	19	125	..	125	5,952	..	5,952	33	18,817	24,831
Saddlery and harness factories ..	23	249	17	266	15,375	529	15,904	..	63,735	34,559
Tanning, fellmongering, and wool-scouring establishments ..	117	1,623	6	1,629	116,715	268	116,983	686	1,237,252	171,405
Ship- and boat-building yards ..	40	108	..	108	6,724	..	6,724	49	25,233	14,288
Graving-docks and patent slips ..	6	29	..	29	2,785	..	2,785	435	5,422	331,806
Sail and oilskin factories ..	39	92	51	143	5,660	1,361	7,021	..	30,166	23,623
Furniture factories	71	472	24	496	33,257	787	34,044	127	85,327	84,673
Chair and wash-board factories ..	6	8	..	8	272	..	272	2	1,277	2,020
Venetian-blind works	15	45	..	45	2,588	..	2,588	14	9,878	7,236
Mattrass factories	5	15	..	15	593	..	593	..	1,850	2,680
Chemical works	7	112	2	114	9,104	62	9,166	121	75,320	44,471
Hæmatite-paint factories ..	5	11	1	12	407	12	419	45	1,503	3,015
Sheep-dip factories	6	27	2	29	1,290	..	1,290	17	9,138	2,716
Herbal-remedy factories	4	8	2	10	320	50	370	..	2,265	3,410
Woollen mills	9	655	761	1,416	59,583	32,036	91,619	1,400	302,423	223,473
Flock mills	5	10	..	10	264	..	264	44	1,705	2,570
Cleaning and dyeing works ..	16	33	25	58	1,506	705	2,211	31	7,530	9,980
Clothing, and boot and shoe factories	92	2,059	2,348	4,407	145,693	64,770	210,463	131	616,158	166,739
Hat and cap factories	15	31	41	72	2,437	1,117	3,554	6	10,902	10,560
Stocking-weaving factories ..	7	1	132	133	25	2,516	2,541	3	9,357	4,565
Waterproof factories	4	15	78	93	1,344	2,540	3,884	2	22,354	5,316
Rope and twine works	24	150	..	150	6,840	..	6,840	280	52,400	40,961
Flax mills	52	645	2	647	17,544	..	17,544	577	32,546	31,359
Other industries	58	463	229	692	35,977	4,739	40,716	1,122	435,381	207,569
Totals	2,459	22,986	4,403	27,389	1,776,076	131,516	1,907,592	28,096	9,549,360	5,796,017

* Not including the Government Railway Workshops. † Not including the Government Printing Office.

The succeeding statement shows the most important industries in operation in 1896, ranged in order of the values of their output for 1895, and compared with the results obtained for 1890 and 1885:—

	Total Value of all Manufactures or Produce, including Repairs.		
	1895.	1890.	1885.
	£	£	£
Meat-freezing and preserving and boiling-down works	1,652,275	1,464,659	543,878
Tanning, fellmongering, and woolscouring	1,237,252	1,026,349	634,915
Sawmills	898,807	832,959	1,177,713
Grain mills	874,656	991,812	754,830
Clothing and boot-and-shoe factories	616,158	570,315	514,506
Butter and cheese factories	501,274	150,957	43,094
Breweries and malthouses	418,830	380,849	421,197
Printing establishments (not including Government Printing Office)	389,124	354,559	273,886
Iron and brass foundries, boilermaking, machinists, &c. (not including Government Railway Workshops)	302,815	403,635	368,919
Woollen mills	302,423	279,175	194,311
Gasworks	199,025	178,947	194,653
Soap and candle works	152,298	155,714	130,745
Coach-building and painting works	148,969	139,660	128,346
Biscuit factories	118,979	127,147	47,784
Agricultural implement factories	102,054	144,472	111,823
Aërated-water factories	98,609	91,691	94,098
Bacon-curing establishments	86,022	83,435	58,799
Furniture factories	85,327	131,314	162,375
Chaff-cutting works	78,497	63,236	54,440
Chemical works	75,320	41,568	34,283
Coffee and spice works	74,339	64,024	98,234
Brick, tile, and pottery works	66,140	56,830	91,797
Saddlery and harness factories	63,735	37,347	..
Tinware factories	63,723	14,297	8,500
Rope and twine works	52,400	76,711	56,413
Fruit-preserving and jam-making works	36,108	27,255	32,292
Confectionery works	33,235	17,248	17,130
Flax-mills	32,546	234,266	20,059
Sail, tent, and oilskin factories	30,166	31,083	25,574
Ship- and boat-building works	25,233	35,847	56,132
Spouting and ridging works	23,762	33,140	25,478
Brush and broom factories	23,363	13,340	7,786
Waterproof factories	22,354	..	..
Cooperages	19,233	11,540	11,862
Cycle factories	18,817	5,655	1,301
Woodenware factories	18,276	9,050	..
Lime and cement works	15,881	19,416	16,928
Sausage-skin and violin-string factories	13,472	10,582	..
Sauce and pickle works	13,417	6,407	3,145
Bone-mills	12,246	4,628	8,337
Basket and perambulator factories	11,920	7,381	4,375
Hat and cap factories	10,902	21,628	13,695
Fish-curing and -preserving works	10,292	19,537	12,182
Baking-powder factories	10,153	5,637	4,120
Venetian-blind factories	9,878	4,776	6,470
Stocking-weaving factories	9,357	5,650	6,200
Sheep-dip factories	9,138	..	..
Colonial-wine works	8,963	3,456	3,626
Paper-bag and cardboard-box factories	7,698	4,497	..
Other industries in respect of which the value of the manufactures was less than £8,000	463,899	380,156	235,148
Totals	£9,549,360	8,773,837	6,711,379


Total Value of Manufactures £3,543,360
Meat freezing and preserving and boiling-down works £1652,275
Tanning, Fellmongering and Wool-scouring £1,237,252
Sawmills £898,807
Grain mills £874,656
Clothing and Boot and Shoe factories £616,158
Butter and Cheese factories £501,274
Breweries and Malthouses £418,830
Printing establishments (not including Gov't Printing Office) £389,124
Iron & brass foundries, boiler-making, machinists etc* £302,815
Woollen mills £302,423
Gas works £199,025
Soap and Candle works £152,298
Coach building & painting works £148,369
Biscuit factories £118,979
Agricultural implement factories £102,054
Other Industries £1634,421

Manufactories and Works (A)

Value of Manufactures for the Year 1895

Aerated-water factories	£98,609
Bacon curing establishments	£86,022
Furniture factories	£85,327
Chaff-cutting works	£78,497
Chemical works	£75,320
Coffee and Spice works	£74,339
Brick, Tile and Pottery works	£66,140
Saddlery and Harness factories	£63,735
Tinware factories	£63,723
Rope and Twine works	£52,400
Fruit-preserving and Jam-making works	£36,108
Confectionery works	£33,235
Flax mills	£32,546
Sail, Tent and Oilskin factories	£30,166
Ship and Boat-building yards	£25,233
Spouting and Ridging works	£23,762
Brush and Broom factories	£23,363
Waterproof factories	£22,354
Others	£663,542
	£1634,421

(* Not including Government Railway workshops)

Manufactories and Works. (B)

Number of Hands employed as in April, 1896.

27,389 Hands employed.

	Hands
Clothing and Boot and Shoe factories.	4,407
Saw-mills, Sash and Door factories	4,059
Printing establishments (not including Government Printing Office)	2,351
Meat freezing, preserving and boiling-down works	2,037
Iron and Brass foundries, boiler-making, machinists and mill wrights †	1,642
Tanning, fellmongering and wool-scouring establishments	1,629
Woollen mills	1,416
Coach-building and painting	807
Flour mills	647
Agricultural implement factories	581
Butter and Cheese factories	576
Breweries and Malthouses	560
Furniture factories	496
Brick, Tile and Pottery works	455
Biscuit factories	425
Grain mills	413
Other works and manufactories *	4,382

	Hands
* Aerated-water factories	347
Gasworks	295
Tinware factories	289
Saddlery and Harness factories	266
Chaff-cutting works	212
Fruit-preserving and Jam-making works	193
Soap and Candle works	190
Sugar-refining works	160
Rope and Twine works	150
Sail, Tent and Oilskin factories	143
Stocking-weaving factories	133
Cycle factories	125
Bacon-curing establishments	123
Match factories	121
Coffee and Spice works	119
Chemical works	114
Ship and Boat-building yards	108
Waterproof factories	93
Others	1701
	4,882

(† Not including Government Railway Workshops.)

The order of the principal industries, ranged according to the number of hands employed, is as follows:—

	Number of Hands. 1896.	1891.
Clothing and boot and shoe factories	4,407	3,233
Sawmills, sash and door factories	4,059	3,266
Printing establishments (excluding Government Printing Office)	2,351	2,569
Meat freezing, preserving, and boiling-down works	2,037	1,568
Iron and brass foundries, boiler-making, machinists, and millwrights (excluding Railway Workshops)	1,642	1,787
Tanning, fellmongering, and wool-scouring establishments	1,629	1,196
Woollen-mills	1,416	1,175
Coach-building and painting works	807	678
Flax-mills	647	3,204
Agricultural implement factories	581	528
Butter and cheese factories	576	269
Breweries and malthouses	560	563
Furniture factories	496	585
Brick, tile, and pottery works	455	494
Biscuit factories	425	331
Grain-mills	419	499
Aërated-water factories	347	261
Gasworks	295	249
Tinware factories	289	93
Saddlery and harness factories	266	184
Chaff-cutting works	212	205
Fruit-preserving and jam-making works	193	117
Soap and candle works	190	209
Sugar refining works	160	110
Rope and twine works	150	222
Sail, tent, and oilskin factories	143	124
Stocking-weaving factories	133	51
Cycle factories	125	31
Bacon-curing establishments	123	84
Match factories	121	..
Coffee and spice works	119	81
Chemical works	114	55
Ship- and boat-building yards	108	145
Waterproof factories	93	..
Brush and broom factories	92	81
Spouting and ridging works	90	100
Ammunition factories	90	80
Paper-bag and cardboard-box factories	86	35
Paper-mills	84	48
Woodenware factories	81	51
Lime and cement works	79	98
Basket and perambulator factories	76	63
Cooperages	76	53
Fish-curing and -preserving works	75	140
Hat and cap factories	72	112
Confectionery works	69	53
Sauce and pickle works	68	41
Cleaning and dyeing works	58	48
Sausage-skin and violin-string factories	56	73
Colonial wine works	53	24
Bone-mills	46	25
Venetian-blind factories	45	29
Rabbit-preserving works	32	..
Graving docks and patent slips	29	64
Sheep-dip factories	29	..

	Number of Hands. 1896.	1895.
Starch and soda works	27	13
Textile bag factories	22	14
Pumice works	20	..
Industries employing under 20 hands	246	222
	27,389	25,633

MEAT-FREEZING AND PRESERVING, WITH BOILING-DOWN.

Forty-three of these establishments were returned in 1896, being exactly the same number as in 1891. The hands employed increased from 1,568 to 2,037 in the five years; 52 of the hands working in 1896 were females. The wages paid also increased from £138,459 in 1890 to £180,775 in 1895. The carcases of sheep and lambs frozen increased by 631,624, besides which 2,463,406 pounds weight of legs of mutton were frozen in 1895; but in frozen beef there was a great falling off. The chilled beef, however, shows development from 500,000 lb. in 1890 to 778,775 lb. Other frozen produce (mostly butter), to the value of £65,776, was prepared in 1895. In preserved meats there has been a fall in the product, from 6,291,278 lb. to 4,999,640 lb. The preparation of corned beef ceased altogether since 1890; but tallow shows increase of 3,888 tons. The total value of all the produce was £1,652,275, against £1,464,659 in 1890.

Census Year.	No. of Works.	Hands employed. M.	Hands employed. F.	Wages paid. M.	Wages paid. F.	Machine-power used. Steam.	Machine-power used. Water.	Machine-power used. Hand.	Amount of Horse-power.	Produce, 1895 and 1890. Sheep and Lambs frozen. Carcases.	Sheep and Lambs frozen. Value.
				£	£					No.	£
1896 ..	43	1,985	52	180,471	304	42	3	..	7,492	*2,362,535	*1,213,559
1891 ..	43	1,561	7	138,312	147	39	1	4	5,112	1,730,911	956,036
Increase ..	..	424	45	42,159	157	3	2	..	2,380	*631,624	*257,523
Decrease ..	..	..	..	..	..	..	..	4	..	..	..

Census Year.	Produce for the Years 1895 and 1890—*continued.* Beef frozen. Quantity.	Beef frozen. Value.	Chilled Beef. Quan.	Chilled Beef. Value.	Preserved Meats. Quantity.	Preserved Meats. Value.	Tallow. Quan.	Tallow. Value.
	Lb.	£	Lb.	£	Lb.	£	Tons.	£
1896 ..	1,175,720	12,579	778,775	8,846	4,999,640	74,369	10,958	172,310
1891 ..	19,153,419	195,546	500,000	4,000	6,291,278	122,230	7,070	144,282
Increase ..	..	..	278,775	4,846	..	..	3,888	28,028
Decrease ..	17,977,699	182,967	..	..	1,291,638	47,861	..	..

* Also 2,463,406 lb. legs of mutton frozen in 1895, valued at £16,373.

Census Year.	Produce for the Years 1895 and 1890—*continued.*							
	Corned Beef.		Bonedust.		Neatsfoot and Trotter Oil.		Bones, Horns, Hoofs, &c.	
	Quan.	Value.	Quan.	Value.	Quan..	Value.	Quan.	Value.
	Casks.	£	Tons.	£	Galls.	£	Tons.	£
1896	..	..	*3,248	*11,865	15,067	2,097	113	188
1891	6,339	14,006	2,703	15,484	10,575	2,010	3,059	6,490
Increase ..	..	..	545	..	4,492	87	..	..
Decrease ..	6,339	14,006	..	3,619	..	..	2,946	6,302

Census Year.	Produce, 1895 and 1890 —*continued.*		Approximate Value of		
	Other Products: Value.	Total Value of all Produce, 1895 and 1890.	Land.	Buildings.	Machinery and Plant.
	£	£	£	£	£
1896	†130,665	1,652,275	67,504	326,224	317,323
1891	4,575	1,464,659	67,206	229,607	179,338
Increase ..	126,090	187,616	298	96,617	137,985

* Also 2,206 tons of other manures in 1895, valued at £9,424.

† Including £65,776, value of frozen butter and other minor frozen products.

Canterbury (with Marlborough) takes the lead in the value of the output for 1895, £689,276; Wellington second place, £348,412; Otago third, £267,252; Auckland shows £116,234; and Taranaki and Hawke's Bay £194,045.

Bacon-curing.

The number of the establishments was 37 in 1896, against 33 in 1891, with an increase of 39 hands and of £698 in wages paid. The quantity of bacon and hams cured also shows development; while the capital invested in land, buildings, machinery, and plant has apparently increased by £8,338 during the five years.

Census Year.	Number of Works.	Hands employed.		Wages paid.	Machine-power used.		Amount of Horse-power.
		M.	F.		Steam.	Water.	
				£			H.p.
1896	37	118	5	7,394	7	1	49
1891	33	83	1	6,696	..	..	7
Increase ..	4	35	4	698	7	1	42

Census Year.	1895 and 1890.		Approximate Value of		
	Bacon and Hams cured.	Total Value of all output.	Land.	Buildings.	Machinery and Plant.
	Cwt.	£	£	£	£
1896	34,060*	86,022	6,823	11,090	4,605
1891	29,448	83,435	4,270	8,825	1,085
Increase ..	4,612	2,587	2,553	2,265	3,520

* Also 5,200 sides and rolls of bacon.

Fish-curing and Preserving.

More fish-curing was done in 1895 than in 1890, the increase in weight being 884,239 lb. on a quantity of 835,273 lb. cured in the former year, the product for 1895 being 1,719,512 lb. But the output of tinned fish diminished from 335,046 lb. to 113,304 lb., and the total value of all products of the 27 establishments fell from £19,537 to £10,292.

Butter and Cheese Factories.

In 1896 there were 170 of these factories, having in connection with them 105 creameries, in regard to which the particulars as to hands, wages, &c., have been included: 24 creameries were in Auckland, 31 in Taranaki, 29 in Wellington, 1 in Nelson, 12 in Canterbury, and 8 in Otago. In 1891 the number of factories was only 74. The number of hands in 1895 was more than double the number for 1890, increasing from 269 to 576, with a corresponding increase in respect of wages. The butter produced in 1895, shown in pounds weight, amounted to 11,336,776 lb., a striking contrast to the output for 1890, which was only 1,969,759 lb. The output of cheese also rose from 1,960 tons to 4,323 tons; and the total value of all products from £150,957 to £501,274.

The Taranaki Provincial District had 53 factories, turning out most butter, and coming second in cheese; Otago had 44 factories, and stood first in cheese-making; Auckland had 21 factories, Wellington 18, and Canterbury 14, with quantities of butter and cheese not very widely different. Hawke's Bay, Marlborough, and Nelson each had a small output.

Far more butter was made in the North Island factories than in those of the Middle Island. The figures are — North Island, 9,267,778 lb.; Middle Island, 2,068,998 lb. But the Middle Island factories produced 2,395 tons of cheese, against 1,928 tons in the North Island.

Census Year.	No. of Factories.	Hands Employed.		Amount paid in Wages.		Machine-power used.					Amount of Horse-power.
		M.	F.	M.	F.	Steam.	Water.	Gas and Oil.	Horse.	Hand.	
				£	£						H.p.
1896 ..	170	548	28	39,716	441	234	33	1	3	7	1,531
1891 ..	74	218	51	13,800	1,128	60	6	1	2	5	387
Increase	96	330	..	25,916	..	174	27	..	1	2	1,144
Decrease	..	..	23	..	687	..	..	..	..	..	..

Census Year.	Produce for the Years 1895 and 1890.					Approximate Value of		
	Cheese.		Butter.		Total Value of all Produce.	Land.	Buildings.	Machinery and Plant.
	Quan.	Value.	Quan.	Value.				
	Tons.	£	Lb.	£	£	£	£	£
1896 ..	4,323	146,158	11,336,776	355,116	501,274	27,335	91,601	115,070
1891 ..	1,960	68,710	1,969,759	73,340	150,957	41,396	31,648	27,409
Increase	2,363	77,448	9,367,017	281,776	350,317	..	59,953	87,661
Decrease	..	..	..	..	..	14,061	..	..

GRAIN-MILLS.

Here the result of a five years' comparison is to show, what might be expected, a decrease in the number of mills in operation and decline of hands employed, also in output of grain, and other details. There were only 90 mills at work in 1896 against 129 in 1891, while the hands fell in number by 80, and the annual wages from £52,384 to £40,890. The fall in the grain operated on, and in the quantity and value of the produce, are given in the accompanying statement:—

Census Year.	No. of Mills.	Number of Hands employed.	Wages paid.	Machine-power used.					Amount of Horse-power.	Number of		Grain operated upon, 1895 and 1890.
		M.	M.	Steam.	Water.	Wind.	Horse.	Wind, Steam, and Gas.		Pairs of Stones.	Sets of Rollers.	Wheat.
			£									Bushels.
1896 ..	90	419	40,890	51	45	1	..	1	2,333	144	406	3,815,433
1891 ..	129	499	52,384	63	77	..	3	1	2,906	274	273	4,406,350
Increase	..	..	..	..	..	1	..	..	..	..	133	..
Decrease	39	80	11,494	12	32	..	3	..	573	130	..	590,917

Census Year.	Grain operated upon, 1895 and 1890—*continued.*		Produce for the Years 1895 and 1890.			Approximate Value of		
	Other Grain.	Value.	Flour.	Meal.	Value.	Land.	Buildings.	Machinery and Plant.
	Bushels.	£	Tons.	Tons.	£	£	£	£
1896 ..	731,448	653,219	81,033	16,482	874,656	41,730	134,714	179,403
1891 ..	694,945	739,590	95,133	27,776	991,812	77,237	148,410	166,181
Increase ..	36,503	..	..	..	..	..	..	13,222
Decrease ..	..	86,371	14,100	11,294	117,156	35,507	13,696	..

Biscuit Factories.

With reduced operations of the grain-mills it is found that the biscuit factories in work were only 17 for 1896 against 22 in 1891, but the value of the manufactures was more than maintained, having been £118,979 in 1895 against £117,147 for 1890. The number of hands employed and wages paid also increased somewhat:—

Census Year.	Number of Works.	Hands.		Wages.		Machine-power used		Horse-power.
		M.	F.	M.	F.	Steam.	Gas.	
				£	£			H.-p.
1896 ..	17	345	80	18,801	1,355	10	4	134
1891 ..	22	284	47	16,150	1,049	..	..	134
Increase ..	..	61	33	2,651	306	10	4	..
Decrease ..	5	..	..	..	..	..	..	..

Census Year.	Biscuits made.	Total Value of Manufactures for 1895 and 1890.	Approximate Value of		
			Land.	Buildings.	Machinery and Plant.
	Tons.	£	£	£	£
1896 ..	3,003	118,979	11,340	21,575	25,951
1891 ..	*	117,147	11,900	17,069	19,991
Increase ..	..	1,832	..	4,506	5,960
Decrease ..	..	..	560	..	..

Fruit-preserving and Jam-making.

This industry developed from 15 establishments in 1891 to 22 in 1896. Bottled or preserved fruit, jam, and other kinds of preserves were all more largely made in the year 1895 than in 1890, and the

* Not stated.

total annual value of manufactures increased by £8,853, the amount being £27,255 in 1890 and £36,108 in 1895.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.			Amount of Horse-power.	Value of Materials used, 1895 and 1890.
		M.	F.	M.	F.	Steam.	Water.	Hand		
				£	£				H.-p.	£
1896 ..	22	103	90	5,101	1,450	6	..	..	77	20,542
1891 ..	15	74	43	3,781	961	5	..	10	33	13,413
Increase	7	29	47	1,320	489	1	..	..	44	7,129
Decrease	..	..	..	..	..	..	..	10	..	..

Census Year.	Manufactures, 1895 and 1890.				Other Preserves.		Value of all Manufactures 1895 and 1890.	Approximate Value of		
	Fruit, bottled or preserved.		Jam made.					Land.	Buildings.	Machinery and Plant
	Quan.	Value.	Quan.	Value.	Quan.	Value				
	Lb.	£	Lb.	£	Lb.	£	£	£	£	£
1896 ..	72,790	1,676	1,930,058	33,355	52,118	1,077	36,108	4,504	9,865	4,498
1891 ..	56,188	1,166	1,250,238	25,985	7,920	104	27,255	2,975	3,305	3,762
Increase	16,602	510	679,820	7,370	44,198	973	8,853	1,529	6,560	736

Confectionery Works.

This industry is becoming an important one. The value of the manufactured articles for the year 1895 reached the sum of £33,235, which is £15,987 in excess of the value returned for 1890. Though the number of establishments remained at 12, the hands employed shows an increase of 16 persons.

Breweries.

The breweries in 1896 show a reduction on the number in 1891 of 17. While the hands employed in 1896 were 11 fewer than in 1891, the wages paid in 1895 were higher than before. The quantity of beer made has not increased greatly in five years, the figures being 5,022,732 gallons in 1890 against 5,249,278 gallons in 1895. Indeed, a large increase was not to be expected, as the consumption of all kinds of beer per head of population (excluding the Maoris) fell from 7·899 gallons in 1890 to 7·421 gallons in 1895. But, notwithstanding this, the beer manufactured in New Zealand on which excise duty was paid shows, similarly to the census returns, an increase, though the quantities are not so large. In 1890 duty was received by the Government on 4,676,240 gallons of New-Zealand-made beer, and in 1895 on 4,936,400 gallons.

Census Year.	Number of Breweries.	Hands.	Wages paid.	Motive-power employed.					
		M.	M.	Steam.	Water.	Gas.	Wind.	Horse.	Hands.
			£						
1896 ..	85	465	57,327	56	6	4	2	5	14
1891 ..	102	476	54,825	62	6	4	1	3	26
Increase	..	..	2,502	..	..	..	1	2	..
Decrease	17	11	..	6	..	..	..	..	12

Census Year.	Amount of Horse-power.	Number of	
		Horses employed.	Drays employed.
	H.-p.		
1896	441	180	149
1891	409	208	163
Increase	32	..	..
Decrease	..	28	14

Census Year.	Materials used during Years 1895 and 1890.				Beer made 1895 and 1890.		Approximate Value of		
	Sugar.	Malt.	Hops.	Value.	Quantity.	Value.	Land.	Buildings.	Machinery and Plant.
	Lb.	Bush.	Lb.	£	Gal.	£	£	£	£
1896	1,607,144	328,059	424,839	125,706	5,249,278	336,734	51,533	115,033	63,850
1891	1,345,935	348,134	441,364	134,087	5,022,732	300,508	66,764	113,565	56,496
Inc.	261,209	..	..	..	226,546	36,226	..	1,468	7,354
Dec.	..	20,075	16,525	8,381	..	..	15,231	..	..

MALTHOUSES.

The malthouses in connection with the breweries were 31 at last census, and 356,408 bushels of barley were malted in the year 1895. The returns do not show much development in the malting business since 1890.

Census Year.	Number of Works.	Hands employed.	Wages paid.	Machine-power used.						Amount of Horse-power.
				Steam.	Water.	Gas.	Horse.	Hand.	Wind.	
			£							H.-p.
1896 ..	31	95	9,398	3	1	1	1	25	..	59
1891 ..	27	87	7,875	6	..	1	..	20	..	47
Increase	4	8	1,523	..	1	..	1	5	..	12
Decrease	..	..	..	3	..	..	..	..	..	..

Census Year.	Value of Materials used.	Barley Malted, 1895 and 1890.		Approximate Value of		
		Quantity.	Value.	Land.	Buildings.	Machinery and Plant.
	£	Bushels.	£	£	£	£
1896 ..	52,881	356,408	82,096	6,685	27,910	2,909
1891 ..	54,983	326,070	80,341	7,845	31,270	3,327
Increase	..	30,338	1,755	..	..	..
Decrease	2,102	..	..	1,160	3,360	418

COLONIAL-WINE MAKING.

Besides 15,860 gallons of colonial wine made in 1895, and also 63 gallons of brandy used to fortify the wine, 19,178 gallons of cider were manufactured. These results are satisfactory on comparison with those of 1890, when the wine amounted to only a little over 9,000 gallons, and hardly any cider was produced.

Census Year.	Number of Works.	Hands.		Wages.		Machine-power used: Steam.	Horse-power.	Wine made.	Cider.	Value of Products, 1895-90.	Approximate Value of		
		M.	F.	M.	F.						Land.	Buildings.	Machinery and Plant
				£	£		H-p.	Galls.	Galls.	£	£	£	£
1896	19	41	12	1,925	95	2	6	15,860*	19,178	8,963	8,224	2,929	1,679
1891	14	18	6	458	120	..	..	9,333	375	3,456	2,850	2,060	620
Inc.	5	23	6	1,467	..	2	6	6,527	18,803	5,507	5,374	869	1,059
Dec.	..	..	..	..	25	..	..	..	..	..	..	..	..

* Also 63 gallons of brandy made and used to fortify wines.

AËRATED-WATER AND CORDIAL FACTORIES.

With 132 of these factories, employing 330 males and 17 females, the increase in the quantity of aërated waters manufactured was from 976,644 dozens in 1890 to 1,091,580 dozens in 1895, or 114,936 dozens, being at the rate of nearly 12 per cent., and keeping pace with the increase of population.

Cordial-making shows still better; but tonic beer, according to the returns, was not so largely made in 1895 as it was five years previously. The total value of all manufactures gives a good result, as will be seen below.

Census Year.	No. of Works.	Hands employed.		Wages paid.		Machine-power used.	
		M.	F.	M.	F.	Steam.	Water.
				£	£		
1896	132	330	17	21,184	261	46	17
1891 .. .	112	253	8	16,982	39	27	23
Increase ..	20	77	9	4,202	222	19	..
Decrease .	..	..	..	..	..	..	6

Census Year.	Machine-power used —*continued.*			Horse-power.	Manufactures for the Years 1895 and 1890.		
	Horse.	Gas.	Hand.		Aërated Waters.	Cordials.	Tonic Beer.
				H.-p.	Doz.	Doz.	Doz.
1896	11	24	35	216	1,091,580	20,720	17,415
1891	14	17	32	155	976,644	13,906	20,582*
Increase ..	..	7	3	61	114,936	6,814	..
Decrease ..	3	..	..	..	..	..	3,167*

Census Year.	Manufactures, 1895 and 1890 —*continued.*		Cider.	Total Value of Manufactures.	Approximate Value of		
	Miscellaneous.				Land.	Buildings.	Machinery and Plant.
	Quan.	Value.					
	Gals.	£	Casks.	£	£	£	£
1896	†8,907	1,350	50	98,609	19,476	32,439	37,429
1891	3,270	1,075	..	91,691	19,970	24,680	28,497
Increase ..	5,637	275	50	6,918	..	7,759	8,932
Decrease ..	..	..	..	..	494	..	..

* And 980 gallons. † Including 6,000 gallons vinegar.

Coffee and Spice Works.

The number of these works increased from 17 in 1891 to 18 in 1896, and the hands from 81 to 119. The value of manufactured goods rose from £64,024 to £74,339 in the five years.

Sauce- and Pickle-making.

Sixty-eight persons were employed in this industry in 1896. Pickles to the quantity of 9,949 dozens of pints formed the output for 1895, against 4,128 dozens in 1890. But sauce-making declined from 25,213 dozens of pints to 20,539 dozens.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine power used.	Amount of Horse-power.	Value of Materials used.
		M.	F.	M.	F.	Steam.		
				£	£		H.-p.	£
1896 ..	24	44	24	1,835	622	3	57	7,934
1891 ..	12	22	19	1,078	555	1	1	2,713
Increase	12	22	5	757	67	2	56	5,221

Census Year.	Manufactures for the Years 1895 and 1890.					Total Value of Manufactures.	Approximate Value of		
	Sauce.		Pickles.		Other Condiments.		Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.	Quantity.	Value.					
	Doz. Pnts	£	Doz. Pnts	£	£	£	£	£	£
1896 ..	20,539	6,229	9,949	3,793	3,395	13,417	5,175	5,160	1,574
1891 ..	25,213	4,366	4,128	1,393	648	6,407	1,885	2,325	886
Increase	..	1,863	5,821	2,400	2,747	7,010	3,290	2,835	688
Decrease	4,674	..	..	..	..	..	..	..	..

Soap and Candle Works.

Although the number of works advanced from 19 in 1891 to 22 in 1896, the persons employed were slightly fewer in the latter year, and the quantity of soap manufactured in 1895 (85,637 cwt.) was returned as a little less than that made in 1890. The manufacture of candles diminished in the quinquennium, besides that of other manufactures (various) at the above works; leaving a result of £152,298, value of all manufactures in 1895, against £155,714 in 1890.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.		Amount of Horse-power.	Value of Materials used.
		M.	F.	M.	F.	Steam.	Water.		
				£	£			H.-p.	£
1896.. ..	22	187	3	16,882	21	17	..	252	98,194
1891.. ..	19	201	8	21,194	200	14	1	259	93,386
Increase	3	..	..	..	..	3	..	..	4,808
Decrease	..	14	5	4,312	179	..	1	7	..

Census Year.	Manufactures for 1895 and 1890.				Total Value of Manufactures.	Approximate Value of		
	Soap.		Candles.	Other Manufac'trs.		Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.	Value.					
	Cwt.	£	£	£	£	£	£	£
1896	85,637	71,382	58,512	22,404	152,298	9,884	20,110	28,832
1891	87,137	66,790	62,122	26,802	155,714	11,282	15,650	47,511
Increase ..	..	4,592	..	..	..	..	4,460	..
Decrease ..	1,500	..	3,610	4,398	3,416	1,398	..	18,679

Cooperages.

These numbered 21, according to the returns for 1896. 33,418 casks were made in 1895, against 17,918 in 1890, but the manufacture of kegs fell off greatly. The noticeable feature in the 1895 returns is the construction of butter-boxes to the number of 78,378, and of cheese-cases 3,660, which articles were apparently not made at all in the colony five years ago, kegs being more generally used instead.

Census Year.	Number of Works.	Hands employed. M.	Wages.	Machine-power used. Steam.	Horse-power.	Value of Materials used.
			£		H.-p.	£
1896 ..	21	76	4,250	10	110	10,281
1891 ..	11	53	3,866	..	31	4,608
Increase	10	23	384	10	79	5,673

Census Year.	Manufactures for the Years 1895 and 1890.				Total Value of Output.	Approximate Value of		
	Kegs.	Casks.	Butter-boxes.	Cheese-cases.		Land.	Buildings.	Machinery and Plant.
					£	£	£	£
1896 ..	1,680	33,418	78,378	3,660	19,233	3,297	3,353	4,525
1891 ..	12,848	17,918	..	..	11,540	1,500	2,020	2,200
Increase	..	15,500	78,378	3,660	7,693	1,797	1,333	2,325
Decrease	11,168	..	..	..	..	..	..	..

Sawmills, and Sash and Door Factories.

With an increase of 56 mills since 1890, and 793 hands, there is found by the returns an increase of annual output amounting to 28,937,245 ft. of sawn timber, besides 10,574,274 ft. of resawn, flooring, &c., and 4,216,784 running feet of mouldings, with a large number of doors and sashes. But the total value of all the output only increased from £832,959 for 1890 to £898,807 for 1895. The quantity of timber (first) sawn in Auckland Provincial District during 1895 was 79,464,526 ft., against 34,605,504 ft. in Wellington and 27,423,985 ft. in Otago. Hawke's Bay returned 13,393,212 ft., and Taranaki 11,046,771 ft. Nelson shows 9,085,059 ft., and Westland 8,884,686 ft. Canterbury returned only 3,697,230 ft., and Marlborough 3,452,493 ft. There were employed at the sawmills 4,059 hands.

Census Year.	No. of Mills.	Hands employed.		Wages paid.		Motive-power used.					Amount of Horse-power.
		M.	F.	M.	F.	Steam.	Water.	Gas.	Horse.	Not stated.	
				£							H.-p.
1896 ..	299	4,055	4	323,223		274	29	1	..	..	6,409
1891 ..	243	3,260	6	271,814		218	23	2	..	2	4,637
Inc. ..	56	795	..	51,409		56	6	..	..	..	1,772
Dec. ..	..	..	2	..		..	..	1	..	2	..

Census Year.	Output for the Years 1895 and 1890.						
	Sawn Timber.		Value of Posts, Rails, &c.	Re-sawing, Planed, Flooring, Skirting, &c.		Mouldings.	
	Quantity.	Value.		Quantity.	Value.	Quantity.	Value.
	Ft.	£	£	Ft.	£	Run. ft.	£
1896 ..	191,053,466	627,959	10,998	41,026,223	173,765	12,653,368	44,104
1891 ..	162,116,221	566,535	56,293	30,451,949	144,095	8,436,584	25,786
Inc.	28,937,245	61,424	..	10,574,274	29,670	4,216,784	18,318
Dec.	..	..	45,295	..	..	..	..

Census Year.	Output for 1895 and 1890 —*continued.*		Total Value of all Output.	Approximate Value of		
	Doors and Sashes.			Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.				
	No.	£	£	£	£	£
1896 ..	61,550	41,981	898,807	186,958	100,667	298,797
1891 ..	52,275	40,250	832,959	160,750	92,848	246,674
Inc.	9,275	1,731	65,848	26,208	7,819	52,123
Dec.	..	..	..	..	..	..

GASWORKS.

In April, 1896, there were 27 gasworks in operation, employing 295 persons. Comparing the quantities of gas made in 1890 and 1895 shows an increasing demand, in spite of electricity. In 1890, 426,602,764 cubic feet were made, and in 1895 the quantity was 24·72 per cent. greater, or a total of 532,060,300 cubic feet.

Census Year.	No. of Works.	Hands employed.		Wages paid.		Machine-power used.			Amount of Horse-power.	Produce for the Years 1895 and 1890.	
										Gas made.	
		M.	F.	M.	F.	Steam.	Water.	Gas.		Quantity.	Value.
				£	£				H.-p.	Cubic feet.	£
1896 ..	27	293	2	37,747	102	19	1	8	126	532,060,300	178,196
1891 ..	27	249	..	31,700	..	17	1	3	117	426,602,764	159,838
Inc.	..	44	2	6,047	102	2	..	5	9	105,457,536	18,358

Census Year.	Produce for the Years 1895 and 1890—*continued.*					Total Value of all Produce.	Approximate Value of		
	Coke.		Tar.		Other Residuals: Value.		Land.	Buildings.	Machinery and Plant.
	Quantity.	Value.	Quantity.	Value.					
	Tons.	£	Gallons.	£	£	£	£	£	£
1896 ..	17,339	14,446	345,632	4,649	1,734	199,025	41,422	79,610	645,641
1891 ..	18,758	13,569	409,554	5,420	120	178,947	49,763	61,564	619,163
Increase	..	877	..	..	1,614	20,078	..	18,046	26,478
Decrease	1,419	..	63,922	771	..	..	8,341	..	..

Brick, Tile and Pottery Works.

The manufacture of bricks and drain-pipes developed considerably between the years 1890 and 1895, the number of common bricks annually made having risen from 15,343,420 in 1890 to 18,805,715 in 1895. But in pottery of various kinds the comparison shows a decline in the manufacture. Of 108 establishments, Otago had 30, Auckland 21, Wellington 17, and Canterbury 15. The output of bricks was the greatest in Otago, 5,781,400 in number; Auckland coming next with 4,185,255; Wellington third, with 3,587,250; while in Canterbury 3,485,010 were made.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.					Amount of Horse-power.	Number of Machines used.	
		M.	F.	M.	F.	Steam.	Gas.	Horse.	Water.	Hand.		For tempering or crushing Clay.	For making Bricks or Pottery.
				£	£						H.-p.		
1896 ..	108	454	1	28,179	50	38	1	70	..	1	519	108	92
1891 ..	106	484	10	24,938	252	34	..	59	4	10	459	105	102
Increase	2	..	..	3,241	..	4	1	11	..	..	60	3	..
Decrease	..	30	9	..	202	..	..	..	4	9	..	..	10

Census Year.	Manufactures for the Years 1895 and 1890.					
	Bricks made.			Pottery, &c., made.		
	Common.	Fire-bricks.	Value.	Drain-pipes.	Tiles.	Flower-pots.
	No.	No.	£	No.	No.	Doz.
1896 ..	18,805,715	193,600	34,637	1,175,065	464,851	8,347
1891 ..	15,343,420	657,379	32,160	1,003,732	558,047	24,532
Increase	3,462,295	..	2,477	171,333	..	..
Decrease	..	463,779	..	..	93,196	16,185

Census Year.	Manufactures, 1895 and 1890—*continued.*		Total Value of Manufactures.	Approximate Value of		
	Pottery, &c., made.			Land.	Buildings.	Machinery and Plant.
	Miscellaneous: Value.	Total Value of Pottery, &c.				
	£	£	£	£	£	£
1896 ..	4,249	31,503	66,140	24,074	24,917	27,594
1891 ..	6,594	24,420	56,830	39,313	38,541	41,926
Increase	..	7,083	9,310	..	..	..
Decrease	2,345	..	..	15,239	13,624	14,332

Tinware Factories.

A very large development is observed in respect of this industry. The value of the manufactures rose from £14,297 in 1890 to £63,725 in 1895. In 1885 the value of the goods was only £8,500. The number of hands increased from 93 to 289 in five years, and the establishments from 79 to 90.

Iron and Brass Foundries, Boilermaking, Machinists', etc., Establishments.

The returns do not include the Government Railway Workshops, which have been omitted at previous censuses. Apart from these there is no development shown for the last five years, except in the number of works, which were returned as 90 in 1896; against 79 in 1891. The hands employed fell from 1,787 to 1,642, and the value of the manufactures from £403,635 to £302,815. The decline is noticed generally throughout the returns from various parts of the colony, so that, allowing for all roughness in what are merely returns for statistical purposes, it would appear that there was either great reduction of value or else less work was done in the colony in 1895 than in 1890. But the industry takes fifth place as regards employment of labour.

Agricultural Implement Factories.

In this industry, like that of iron-founding, no development is observed in the money value of the manufactures. The establishments from which returns were received were 34 in 1896 against 36 in 1891. But the hands employed returned at last census were 53 more than in 1891. There were 580 persons engaged in this industry at last census.

Printing Establishments.

The Government Printing Office is not included in the account of this industry. Omitting it, the number of these establishments returned in 1896 was 12 in excess of that for 1891, but the male hands employed actually less, being 2,123, against 2,373 at the previous census. Females employed increased slightly in number. This industry ranks third as to number of persons to whom employment is afforded. The value of the products as set down for the year 1895 gave a total sum of £389,124, against £354,559 for 1890; but there seems to have been difficulty experienced in or reluctance felt to making any attempt at returning the value of the product, and in seven cases no information whatever was obtained.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.		
		M.	F.	M.	F.	Steam.	Water.	Gas.
				£	£			
1896 ..	154	2,123	228	204,165	12,137	22	16	50
1891 ..	142	2,373	196	207,067	7,118	21	22	44
Increase	12	..	32	..	5,019	1	..	6
Decrease	..	250	..	2,902	..	..	6	..

Census Year.	Machine-power used—*continued.*			Horse-power.	Value of all Products.	Approximate Value of		
	Horse.	Oil.	Hand.			Land.	Buildings.	Machinery and Plant.
				H.-p.	£	£	£	£
1896 ..	..	3	64	532	389,124	68,847	124,369	203,699
1891 ..	1	..	60	328	354,559	71,366	96,542	173,775
Increase	..	3	4	204	34,565	..	27,827	29,924
Decrease	1	..	..	..	..	2,519	..	..

NOTE.—The table does not include particulars for the Government Printing Office.

Coach Building and Painting.

One hundred and twenty-nine more persons received employment in this industry in 1896 than in 1891, and 8 additional works were returned. The value of the manufactures rose from £139,660 in 1890 to £148,969 at last census.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Machine-power used.		
		M.	F.	M.	F.	Steam.	Gas.	Water.
				£	£			
1896 ..	116	807	..	57,377	..	19	4	2
1891 ..	108	675	3	52,526	75	15	2	1
Increase	8	132	..	4,851	..	4	2	1
Decrease	..	..	3	..	75	..	..	..

Census Year.	Amount of Horse-power.	Total Value of Manufactures (including repairs).	Approximate Value of		
			Land.	Buildings.	Machinery and Plant.
	H.-p.	£	£	£	£
1896 ..	119	148,969	41,376	40,076	24,350
1891 ..	94	139,660	45,727	31,646	18,852
Increase	25	9,309	..	8,430	5,498
Decrease	..	..	4,351	..	..

CYCLE WORKS.

Cycle-making shows considerable development. There are now 125 persons employed in 19 works, and the value of manufacture and repairs increased from £5,655 in 1890 to £18,817 in 1895; 734 cycles were made in the latter year at these manufactories.

Census Year.	Number of Works.	Hands.		Wages.		Machine-power used.		Amount of Horse-power.
		M.	F.	M.	F.	Steam.	Gas.	
				£	£			H.-p.
1896	19	125	..	5,952	..	4	4	33
1891	7	30	1	1,904	25	..	..	17
Increase ..	12	95	..	4,048	..	4	4	16
Decrease ..	..	..	1	..	25	..	..	..

Census Year.	Value of Materials used in 1895 and 1890.	Number of Cycles manufactured in 1895 and 1890.	Total Value of Manufactures (including Repairs) 1895 and 1890.	Approximate Value of		
				Land.	Buildings.	Machinery and Plant.
	£		£	£	£	£
1896	7,696	734	18,817	7,925	12,240	4,666
1891	1,663	318	5,655	2,950	2,624	1,715
Increase ..	6,033	416	13,162	4,975	9,616	2,951

Saddlery and Harness Works.

Of these, being establishments having large operations, and manufacturing for the supply of wholesale orders, 23 were returned in 1896. There is a large proportional increase during five years in the hands employed, and the total value of manufacture and repairs.

Census Year.	Number of Works.	Hands employed.		Wages paid.		Value of Materials used, 1895 and 1890.
		M.	F.	M.	F.	
				£	£	£
1896	23	249	17	15,375	529	30,194
1891	8	173	11	8,591	280	23,070
Increase ..	15	76	6	6,784	249	7,124

Census Year.	Total Value of Manufactures (including Repairs), 1895 and 1890.	Approximate Value of		
		Land.	Buildings.	Machinery and Plant.
	£	£	£	£
1896	63,735	16,323	14,000	4,236
1891	37,347	5,062	5,212	1,425
Increase ..	26,388	11,261	8,788	2,811

Brush and Broom Making.

These works numbered 15 in 1896, against 11 in 1891. The hands employed were 92 at the last census; and the value of manufactured articles increased from £13,340 in 1891 to £23,363 in 1896.

Fellmongering, Tanning, Currying, and Woolscouring.

These establishments stand sixth in importance considered as a means of employment. There were 1,629 hands working in April, 1896, against 1,196 in 1891, and 13 additional works are shown by the last returns. The increase in wool scoured and sliped was from 12,024,446 lb. in 1890 to 19,723,481 lb. in 1895; and in skins stripped, and hides and skins tanned, equally satisfactory results were obtained. The total annual value of the manufacture was about 20 per cent. greater in 1895 than recorded in 1890.

Census Year.	No. of Works.	Hands employed.		Wages paid.		Machine-power used.					Horse-power.	Number of Tan-pits.	Value of Bark, Coal, Soap, &c.
		M.	F.	M.	F.	Steam.	Water.	Oil.	Wind.	Horse.			
				£	£						H.-p.		£
1896 ..	117	1,623	6	116,715	268	49	8	1	3	..	686	1,252	134,176
1891 ..	104	1,190	6	92,166	276	44	8	..	2	1	474	1,076	..
Increase ..	13	433	..	24,549	..	5	..	1	1	..	212	176	..
Decrease ..	..	..	..	..	8	..	..	..	..	1	..	..	..

Census Year.	Tons of Bark used, and Kind.					Manufacture or Produce for the Years 1895 and 1890.		
	Wattle.		New Zealand.	Other Kinds.	Total Bark used.	Wool Scoured and Sliped.	Skins stripped of Wool.	Hides tanned.
	Australia.	Tasmania.						
	Tons.	Tons.	Tons.	Tons.	Tons.	Lb.	No.	No.
1896.. ..	3,419	1,423	359	24	5,225	19,723,481	3,879,560	154,505
1891.. ..	2,591	1,452	383	122	4,548	12,024,446	2,478,298	118,925
Increase ..	828	..	..	..	677	7,699,035	1,401,262	35,580
Decrease ..	..	29	24	98	..	..	..	...

Census Year.	Manufacture or Produce, 1895 and 1890 —*continued.*		Total Value of Produce and Manufactures, 1895 and 1890.	Approximate Value of		
	Skins tanned.	Pelts, Salted or Preserved.		Land.	Buildings.	Machinery and Plant.
	No.	No.	£	£	£	£
1896.. ..	856,918	1,418,792	1,237,252	41,490	77,186	52,729
1891.. ..	426,433	1,411,844	1,026,349	48,753	66,886	37,953
Increase ..	430,485	6,948	210,903	..	10,300	14,776
Decrease ..	..	..	..	7,263	..	..

CHEMICAL WORKS.

There has been steady growth in the value of the manufacture from £34,283 in 1886 to £41,586 in 1891, and £75,320 in 1896. One hundred and fourteen hands were employed at last census in seven establishments.

SHIP- AND BOAT-BUILDING.

In the report on the census of 1891 it was remarked that the comparison for that year with 1886 did not show the industry as thriving. A somewhat similar result is observed in comparing the returns for 1891 with those of 1896—at least, the hands employed and the value of manufactures fell materially. The figures are :—

Census Year.	Number of Yards.	Hands employed.	Wages paid.	Total Value of all Manufactures (including Repairs) 1895 and 1890.
			£	£
1896	40	108	6,724	25,233
1891	37	145	10,831	35,847
Increase	3	..	..	..
Decrease	..	37	4,107	10,614

Similarly, the returns of sail, tent, and oilskin factories show a slight decrease in the money-value of the manufactured articles, from £31,083 to £30,166, though the hands employed were 143 in 1896, against 124 in 1891.

Woollen Mills.

These mills employed 478 men, 513 women, 177 boys, and 248 girls in 1896. All these numbers give an increase on those of the previous census, but greatest amongst the women, of whom only 373 were in work in 1891, against 513 last year. The wool used in 1895 was 3,485,893 lb., or 786,674 lb. more than in 1890, while most satisfactory increase is exhibited in the quantity of tweed, cloth, blankets, shawls, and rugs made, though the manufacture of flannel and shirting does not seem to have progressed, but rather retrograded.

Census Year.	No. of Works.	Hands employed.				Wages.		Machine-power used.		Horse-power.
		Men.	Women.	Boys.	Girls.	M.	F.	Steam.	Water.	
						£	£			H.-p.
1896	9	478	513	177	248	59,583	32,036	9	2	1,400
1891	8	426	373	176	200	52,250	26,790	8	..	930
Increase ..	1	52	140	1	48	7,333	5,246	1	2	470

Census Year.	Wool used in 1895 and 1890.		Value of other Materials used.	Manufactures for the Years 1895 and 1890.			
	Quantity.	Value.		Tweed.	Cloth.	Flannel.	Blankets.
	Lb.	£	£	Yds.	Yds.	Yds.	Pairs.
1896	3,485,893	100,135	39,182	1,297,012	357,228	554,256	28,576
1891	2,699,219	118,081	*	966,864	34,840	773,528	19,829
Increase ..	786,674	..	..	330,148	322,388	..	8,747
Decrease ..	..	17,946	..	..	..	219,272	..

* Information not available.

Census Year.	Manufactures for Years 1895 and 1890—*contd.*			Total Value of Manufactures.	Approximate Value of		
	Shawls and Rugs.	Shirting.	Other Manufactures.		Land.	Buildings.	Machinery and Plant.
	No.	Yds.		£	£	£	£
1896	20,020	15,384	*	302,423	11,050	68,358	144,065
1891	18,728	29,540	*	279,175	24,600	69,067	166,288
Increase ..	1,292	..	..	23,248	..	..	..
Decrease ..	..	14,156	..	..	13,550	709	22,223

* "Other manufactures" in 1895 consisted of 168,802 lb. and 5,122 spindles of yarn, 21,447 dozen and 28,000 lb. of hosiery, 2,592 knitted garments, and 13,000 mats; and in 1890 of 167,471 lb. and 3,688 spindles of yarn, 3,994 dozen hosiery, and 5,142 knitted garments.

Clothing and Waterproof Factories.

Twenty-seven clothing factories, employing 307 males and 1,751 females, were in operation in April, 1896. The wages paid to the hands employed in 1895 amounted to £73,239, while the value of the manufactures for the year was £258,352; a true comparison of the work done cannot be made with the results shown in 1891, as the returns for the year 1890 were faulty. It is, however, satisfactory to note a large increase in the number of employés, and a corresponding advance in the wages paid.

Census Year.	Number of Factories.	Hands employed.		Wages paid.		Amount of Horse-power.	Total Value of Manufactures, 1895 and 1890.	Approximate Value of		
		M.	F.	M.	F.			Land.	Buildings.	Machinery and Plant.
				£	£	H.-p.	£	£	£	£
1896 ..	27	307	1,751	26,450	46,789	62	258,352	18,550	29,900	8,254
1891 ..	19	229	1,061	19,489	33,265	7	166,579	21,000	34,200	4,535

In addition to clothing factories, four establishments were in 1896 engaged in the manufacture of waterproof garments only. These in 1895 turned out 14,320 waterproofs, valued at £22,354; besides which 5,500 waterproof garments were made in the clothing factories.

Census Year.	Number of Factories.	Hands employed.		Wages paid.		Amount of Horse-power.	Total Value of Manufactures, 1895.	Approximate Value of		
		M.	F.	M.	F.			Land.	Buildings.	Machinery and Plant.
				£	£	H.-p.	£	£	£	£
1896 ..	4	15	78	1,344	2,540	2	22,354	2,650	1,900	766

Boot and Shoe Factories.

Although the returns for 1896 show 18 more factories than in 1891, and a substantial increase in the hands employed and quantities of manufactured goods on the figures for the previous census, yet the total value of all manufactures, as brought out, is only £357,806 for 1895 against £403,736 in 1890. If such a result be correct, it could only be accounted for by much reduced prices. But perhaps all the boots and shoes made in 1890 were not included in the returns as to their number, although dealt with as to total value. It is impossible now to ascertain the facts. At least it may be said that this industry (factories only) employed 1,752 males and 597 females in 1895, and turned out 1,070,655 pairs of boots and shoes, besides slippers and uppers, the boots and shoes alone being 238,101 pairs in excess of the number for 1890.

Census Year.	No. of Works.	Hands employed.		Wages paid.		Machine-power used.				Horse-power.	Value of Materials used in 1895 and 1890.
		M.	F.	M.	F.	Steam.	Water.	Gas.	Hand.		
										H.-p.	£
1896 ..	65	1,752	597	119,243	17,981	1	7	15	41	69	176,838
1891 ..	47	1,475	468	107,040	17,950	2	2	11	32	46	193,251
Increase	18	277	129	12,203	31	..	5	4	9	23	..
Decrease	..	..	..	..	..	1	..	..	..	..	16,413

Census Year.	Manufactures for the Years 1895 and 1890.			Total Value of Manufactures.	Approximate Value of		
	Boots and Shoes.	Slippers.	Uppers.		Land.	Buildings.	Machinery and Plant.
	Pairs.	Pairs.	Pairs.	£	£	£	£
1896 ..	1,070,655	10,409	18,813	357,806	36,989	46,610	26,436
1891 ..	832,554	13,796	10,806	403,736	26,010	37,500	18,627
Increase	238,101	..	8,007	..	10,979	9,110	7,809
Decrease	..	3,387	..	45,930	..	..	..

Flax-mills.

In the report for 1891 it was remarked that "the development shown in this industry would indeed be most encouraging, but, unfortunately, its permanence is questionable." The complete collapse shown by the returns for 1896 proves that the reservation was indeed necessary. Against 177 mills in 1891, only 52 were in operation in 1896. The number of men employed fell from 2,169 to 484; and of boys, numbering 1,029 in 1891, only 163 were found to be working five years later. The wages paid fell from

£116,168 to £17,544. The raw material used, the quantity of fibre dressed, and tow produced in 1895 show, compared with the previous period, a deplorable reduction, and, finally, the money-value of the total output of the mills for 1895 was only £32,546, against £234,266 in 1890. The diminished value of the land, buildings, machinery, and plant in use all tell the same tale.

Census Year.	No. of Works.	Hands employed.		Wages paid.	Machine-power used.		
		Men.	Boys.		Steam.	Water.	Horse.
				£			
1896	52	484	163	17,544	23	30	..
1891	177	2,169	1,029	116,168	125	67	1
Decrease ..	125	1,685	866	98,624	102	37	1

Census Year.	Amount of Horse-power.	No. of Machines used.	Raw Material used, 1895 and 1890.		Fibre dressed, 1895 and 1890.	
			Quantity.	Value.	Quantity.	Value.
	H.-p.		Tons.	£	Tons.	£
1896	553	65	21,770	7,775	2,999	31,771
1891	1,994	304	109,688	59,210	14,412	232,802
Decrease ..	1,441	239	87,918	51,435	11,413	201,031

Census Year.	Tow produced.		Total Value of Output, 1895 and 1890.	Approximate Value of		
	Quantity.	Value.		Land.	Buildings.	Machinery and Plant.
	Tons.	£	£	£	£	£
1896	406	775	32,546	12,448	6,531	12,380
1891	936	1,464	234,266	51,905	28,238	66,649
Decrease ..	530	689	201,720	39,457	21,707	54,269

The export of phormium for the five years between the two censuses was:—

Year.	Exported. Tons.	Value. £
1890	21,158	381,789
1891	15,809	281,514
1892	12,793	214,542
1893	12,587	219,375
1894	4,677	66,256
1895	1,806	21,040

Here the same unsatisfactory result is shown.

MINES AND QUARRIES.

Gold-quartz Mining and Crushing.

Returns were received for 168 gold-quartz mining and crushing works in 1896. In 1891 there were 135 of these returned, and 101 in 1886. Of 168 quartz-crushing works in 1896, employing 2,814 hands, 105, with 2,149 persons employed, belonged to Auckland Provincial District, being located at the Thames and surrounding country.

The census tables show £492,478 as the total value of the gold obtained by quartz crushing in the year 1895. This amount approximates that given by the Mines Department for the year 1895–96—namely, £468,597. Comparison with the two previous censuses shows the output in 1885 (£374,837) to have been higher than that of 1890, but considerably less than that for 1895, quoted above.

The value of the machinery and plant for quartz crushing increased from £211,021 in 1885 to £241,715 in 1890, and £335,474 in 1895.

Census Year.	Number of Works.	Hands employed.	Wages paid.	Machine-power used.							Horse-power.
		M.		Steam.	Water.	Oil.	Electricity.	Compressed Air.	Horse.	Manual and Unspecified.	
			£								H.-p.
1896 ..	168	2,814	226,791	49	70	1	1	2	2	45	3,688
1891 ..	135	1,971	183,582	43	61	..	1	1	2	40	2,656
Increase	33	843	43,209	6	9	1	..	1	..	5	1,032

Census Year.	Quartz crushed.	Gold produced, 1895 and 1890.	Silver produced, 1895 and 1890.	Value of Gold and Silver produced, 1895 and 1890.	Approximate Value of Machinery and Plant.
	Tons.	Oz.	Oz.	£	£
1896 ..	163,743	149,612	81,302	492,478	335,474
1891 ..	129,300	91,142	14,177	278,893	241,715
Increase	34,443	58,470	67,125	213,585	93,759

Hydraulic Gold-mining and Gold-dredging.

Hydraulic gold-mining and gold-dredging together show output to the value of £192,887 for 1895, a large increase on the figures for 1890 and 1885, neither of which reached £75,000. Thirty-five dredges were in use in 1895—three in Nelson and thirty-two in Otago. These dredges had 258 hands, and the expenditure amounted to £56,547, divided as follows:—

Expenditure on Gold-dredging, 1895.	£
On Labour	27,124
„ Coal, plant, and repairs	25,159
„ Management	4,264
Total	56,547

The capital invested in dredges was £161,999, and the return of gold in value £70,016.

Hydraulic Gold-mining.

Census Year.	Number of Works.	Hands employed. M.	Machine-power used. Water.	Machine-power used. Electricity.	Amount of Horse-power.	Claims working Day and Night, or Day only.
1896	105	744	28	2	H.-p. 156	Day and night, 32. Day only, 73.

Census Year.	Expenditure during 1895. Labour.	Water.	Plant and Repairs.	Management.	Total.	Yield of Gold.	Value of Gold.
1896	£ 48,964	£ 17,414	£ 40,183	£ 7,208	£ 113,769	Oz. 31,161	£ 122,871

Gold-dredging.

Census Year.	Number of Works.	Hands employed. M.	Machine-power used. Steam.	Machine-power used. Water.	Amount of Horse-power.
1896	35	258	30	3	H.-p. 963

Census Year.	Expenditure during 1895. Labour.	Coal, Plant, Repairs.	Management.	Total.	Yield of Gold.	Value of Gold.	Approximate Value of Machinery and Plant.
1896	£ 27,124	£ 25,159	£ 4,264	£ 56,547	Oz. 18,124	£ 70,016	£ 86,003

It must be remembered that the greater part of the gold yield in the colony is obtained from alluvial workings, of which no returns are required by the Census Act to be rendered, so that the figures given above must not be regarded as showing any approach to the total production, which amounted to £1,162,164, or, with silver, £1,172,843, for the year 1895.

Collieries.

The returns obtained at the census showed results far short of those published by the Mines Department, and apparently many coal-pits were not included. The number of collieries, the hands employed, and other particulars, which are in the summary table relating to mining given further on, have been chiefly made up from the report of the Mines Department.

Comparing with census results obtained in 1886 and 1891, the persons employed are shown to have increased from 1,448 in the year 1885 to 1,655 in 1890, and 1,799 in 1895, showing gradual progress. The output, which was valued at £255,326 in 1885, advanced to £370,400 in 1895, or at the rate of 45·07 per cent. in ten years. The value of machinery and plant in use (£148,367) in 1895 was, however, less than that for 1890 (£155,671).

Summarised Results.

A summary of all the information obtained under the Census Act relating to mines and quarries is appended :—

	Number of Works.			Number of Hands employed.		
	1896.	1891.	1886.	1895.	1890.	1885.
Gold quartz-mining and crushing works	168	135	101	2,814	1,971	1,156
Hydraulic gold-mining	105	74	124	744	495	617
Gold-dredging	35			258		
Collieries§	164	95	79	1,799	1,655	1,448
Antimony, copper, and manganese mining	1	3	4	3	91	143
Stone (building) quarries	12	9	14	59	35	196
Totals	485	316	322	5,677	4,247	3,560

	Approximate Value of Output.			Approximate Value of Machinery and Plant.		
	1895.	1890.	1885.	1896.	1891.	1886.
	£	£	£	£	£	£
Gold quartz-mining and crushing works	492,478	278,893	374,837	335,474	241,715	211,021
Hydraulic gold-mining	122,871	73,713	74,190	*	154,270	224,787
Gold-dredging	70,016			†86,003		
Collieries§	370,400	279,777	255,326	148,367	155,671	148,773
Antimony, copper, and manganese mining	‡	11,439	1,700	‡	6,750	2,050
Stone (building) quarries	6,041	4,487	19,217	4,070	6,744	13,566
Totals	1,061,806	648,309	725,270	*573,914	565,150	600,197

* Value of machinery and plant used in hydraulic gold-mining not returned; capital invested, £505,674. † Capital invested, £161,999.

‡ Money figures cannot be stated without divulging the operations of single establishments, contrary to promise.

§ Figures for 1895-96 taken from Mines Report; census returns found incomplete, and results not reliable. Value of output taken at 10s. per ton.

Fishing, Oyster-gathering, and Dredging.

This industry was carried on in April, 1896, by 151 single persons and 205 partnerships or companies, against 123 persons and 130 companies in 1891. Thus, 28 persons and 75 partnerships have been added during five years. The persons employed were 1,088 in 1896, against 667 previously. Particulars as to boats and nets used for fishing, and dredges for procuring oysters, all show that more attention is being paid to this industry than formerly.

Of the total number of persons returned as employed in fishing and oyster-gathering, 687, or a little over two-thirds, belonged to Otago.

Census Year.	Fishing, &c., carried on.			Total Number of Persons employed	Number paid by Wages (included in previous column).	Annual Amount paid in Wages.
	By Single Persons.	By Partnerships or Companies.	Total.			
						£
1896	151	205	356	1,088	242	12,080
1891	123	130	253	667	214	15,769
Increase ..	28	75	103	421	28	..
Decrease ..	..	..	..	..	..	3,689

Census Year.	Fishing.					Oyster-gathering and Dredging.				Value of Buildings used for Fishing Purposes.
	Boats used.			Nets used.		Boats used.		Dredges used.		
	Number.	Tonnage.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
			£		£		£		£	£
1896	545	1,347	14,562	1,951	5,137	23	3,073	38	101	3,507
1891	418	788	8,428	1,340	4,638	13	3,124	22	85	3,993
Increase ..	127	559	6,134	611	499	10	..	16	16	..
Decrease ..	..	..	..	..	..	..	51	..	..	486

Fifteen boats (aggregate value, £300; total tonnage, 45 tons), owned by Maoris, and used for oyster-gathering, are not included.

Comparison with Industries in New South Wales and Victoria.

Attention is directed to a statement showing under four different heads comparative results for the principal industries in New Zealand (1896), New South Wales (1895), and Victoria (1894). Mining works are excluded throughout, but for the purposes of this

comparison special returns for the Government Printing Office and Railway Workshops, New Zealand, were procured, and the figures included, as is done in the other two colonies.

—	Establishments. Number.	Hands employed. Number.	Horse-power of Engines. H.-p.	Value of Machinery and Plant. £
New Zealand (including Government Railway Workshops and Government Printing Office, but deducting mining works) 1896	2,475	28,598	28,530	3,073,774
New South Wales (1895) ..	2,409	43,833	42,849	5,855,129
Victoria (1894)	2,675	41,273	30,880	6,640,660

New Zealand shows well as regards number of establishments, but these are evidently not of the magnitude of those in the other two colonies, from the large difference in the number of hands employed and amount of capital invested in machinery and plant. For the year 1891 the figures stood as below:—

Year 1891.	Establishments. Number.	Hands employed. Number.	Horse-power of Engines. H.-p.	Value of Machinery and Plant. £
New Zealand	2,270	26,540	22,148	2,592,993
New South Wales	2,619	46,525	24,909	4,557,022
Victoria	3,296	58,175	30,078	6,604,322

New Zealand would, by the last statement, appear to have made a moderate advance in five years under all four heads of information. For Victoria, the number of establishments and of hands employed are shown as fewer in 1894 than in 1891, but the value of machinery and plant remains about the same. For New South Wales, the establishments and hands are fewer in 1895 than in 1891, but the value of machinery is considerably greater. These comparisons are, probably, by no means closely accurate, but in all probability they are indicative of the true conditions that have obtained, considering the disastrous financial experience of the year 1893 in Australia. The comparisons are shown in respect of each industry in the census report.

SECTION VI.—TRANSPORT AND COMMUNICATION.

(See also Shipping statistics, page 152.)

RAILWAYS.

THE history and progress of railways in New Zealand was specially described in the Year-book of 1894, as was also the line partly built by the New Zealand Midland Railway Company. An account of the line belonging to the Wellington and Manawatu Railway Company appears in the Year-book for 1895.

The length of Government railways open for traffic on the 31st March, 1897, was 2,018 miles, the total cost thereof having been £15,577,392 (besides £957,588 spent on unopened lines), and the average cost per mile £7,719. The cash revenue for the year 1896–97 amounted to £1,286,158; and the total expenditure to £789,054. The net cash revenue—£497,104—was equal to a rate of £3 3s. 10d. per cent. on the capital cost; the percentage of expenditure to revenue was 61·35. The earnings on some of the lines ranged as high as £9 19s. 2d., and even £10 4s. 11d., per cent.

The following statement shows the number of miles of Government railways open, the number of train-miles travelled and of passengers carried, and the tonnage of goods traffic, for the past eight years:—

Year.	Length open.	Train-mileage.	Passengers.	Season Tickets issued.	Goods and Live-stock.*
					Tons.
1889–90	1,813	2,868,203	3,376,459	12,311	2,112,734
1890–91	1,842	2,894,776	3,433,629	13,881	2,134,023
1891–92	1,869	3,010,489	3,555,764	16,341	2,122,987
1892–93	1,886	3,002,174	3,759,044	16,504	2,258,235
1893–94	1,948	3,113,231	3,972,701	17,226	2,128,709
1894–95	1,993	3,221,620	3,905,578	28,623	2,123,343
1895–96	2,014	3,307,226	4,162,426	36,233	2,175,943
1896–97	2,018	3,409,218	4,439,387	43,069	2,461,127

The traffic in local products for the past eight years was:—

Year.	Wool.	Timber.	Grain.	Minerals.	Horses and Cattle.	Sheep and Pigs.
	Tons.	Tons.	Tons.	Tons.	Number.	Number.
1889–90 ..	91,214	172,814	498,199	797,117	41,058	1,036,875
1890–91 ..	87,701	153,078	528,683	828,079	44,999	1,313,155
1891–92 ..	85,888	170,521	442,277	873,899	47,618	1,117,253
1892–93 ..	96,842	169,910	523,637	884,031	46,590	1,359,860
1893–94 ..	101,340	183,192	411,191	864,538	51,573	1,394,456
1894–95 ..	103,328	198,578	388,556	857,917	52,075	1,563,213
1895–96 ..	99,363	213,132	374,699	878,659	50,766	1,893,058
1896–97 ..	98,958	257,825	423,888	1,032,252	47,256	2,016,487

* The equivalent tonnage for live-stock has been given.

In the conveyance of the traffic there are employed 269 locomotives of various classes, 529 carriages, and 8,611 wagons. The total number of officers and men employed is about 5,627.

The particulars of the revenue and expenditure for the past eight years are given herewith :—

Year.	Passenger Fares.	Parcels Luggage and Mails.	Goods and Live-stock.	Rents and Miscellaneous.	Total.	Expenditure.	Net Revenue.	Percentages of Expenditure to Revenue.	Percentages of Revenue to Capital Cost.
	£	£	£	£	£	£	£		£ s. d.
1889–90	369,348	37,097	655,007	34,117	1,095,569	682,787	412,782	62·32	2 19 5
1890–91	353,593	38,997	690,779	38,332	1,121,701	700,703	420,998	62·47	2 18 11
1891–92	364,617	41,795	671,469	37,550	1,115,431	706,517	408,914	63·34	2 15 9
1892–93	390,619	44,801	707,785	38,316	1,181,521	732,141	449,380	61·97	3 1 0
1893–94	402,019	45,206	686,469	39,098	1,172,792	735,358	437,434	62·70	2 17 9
1894–95	385,149	43,270	683,726	38,706	1,150,851	732,160	418,691	63·62	2 14 6
1895–96	389,234	54,736	698,115	40,956	1,183,041	751,368	431,673	63·51	2 16 0
1896–97	410,160	58,084	774,163	43,751	1,286,158	789,054	497,104	61·35	3 3 10

NOTE.—For the years 1895-96 and 1896-97 the railways have been credited with the value of services performed for other Government departments, and debited with the value of work done for the railways by other departments.

The average revenue per mile of railway was £637 17s. 6d., and the average expenditure £391 6s. 10d.; equal to 7s. 6½d. and 4s. 7½d. per train-mile respectively.

The total number of miles travelled by trains was 3,409,218.

In addition to the above railways, there were 167 miles of private lines open for traffic on the 31st March, 1897—namely, the Wellington–Manawatu Railway, 84 miles; the Kaitangata Railway Company's line, 4 miles; and the Midland Railway, 79 miles.

The cost of the construction of the Wellington–Manawatu Railway was £769,344, being at the rate of £9,157 per mile. The term "cost of construction," as applied to railways, includes value of equipment, rolling-stock, &c., not merely the road-line and buildings. The revenue for the twelve months ended the 28th February, 1897, amounted to £94,862, and the working-expenses to £45,294, equivalent to 47·75 per cent. of the revenue.

The traffic return from the opened part of the Midland line for the year ended 31st March, 1897, was £17,768, and the expenditure £14,885, equivalent to 83·77 per cent. of the revenue. The total expenditure on the construction of this line has been about £1,300,000.

Australasian Railways.

The following statement gives the number of miles of Government railways open for traffic and in course of construction in the Australian Colonies in 1895 or 1896.

Colony.	Railways (State). No. of Miles of Line open for Traffic.	No. of Miles of Line in course of Construction.	Cost of Construction of Open Lines.	Gross Receipts.	Working Expenses.	Percentage of Net Revenue to Cost.
			£	£	£	%
Queensland.. ..	2,379	..	16,603,427	1,408,634	608,709	2·65
New South Wales (30th June, 1896)	2,531	147	36,852,194	2,820,417	1,551,888	3·44
Victoria	3,120	2¼	37,909,626	2,581,591	1,543,393	2·73
South Australia ..	1,722	..	12,573,844	950,972	564,593	3·07
Western Australia (30th June, 1896)	588	341	2,316,824	529,616	263,705	11·48
Tasmania	419	..	3,521,956	149,642	120,351	0·83
New Zealand (31st March, 1896)	2,014	114	15,425,532	1,183,041	751,368	2·80

In addition to the Government lines open for traffic in 1895–96, New South Wales had 81 miles of private railway; South Australia, 17 miles; Western Australia, 572 miles; Tasmania, 48 miles; and New Zealand, 167 miles.

Co-operative Public Works.

Remarks on the co-operative system of constructing public works were given in a special article in the Year-book of 1894. The numbers of workmen employed in this manner under Government departments during the financial year 1896–97 were :—

	Public Works Department.	Lands and Survey Department.	State Farm, Levin.	Total.
April, 1896 ..	802	1,452	29	2,283
May, „ ..	919	1,464	23	2,406
June, „ ..	850	1,415	28	2,293
July, „ ..	805	1,373	28	2,206
August, „ ..	847	1,418	26	2,291
September, „ ..	882	1,323	21	2,226
October, „ ..	889	1,425	19	2,333
November, „ ..	915	1,537	20	2,472
December, „ ..	911	1,483	15	2,409
January, 1897 ..	918	1,328	15	2,261
February, „ ..	767	1,350	15	2,132
March, „ ..	741	1,686	15	2,442

The average number of men employed in each year was as follows :—

Year.	Lands and Survey Department.	Public Works Department.	Total.
1891–92	261	527	788
1892–93	280	842	1,122
1893–94	933	1,015	1,948
1894–95	1,103	962	2,065
1895–96	1,572	764	2,336
1896–97	1,459	854	2,313
Gross totals	5,608	4,964	10,572
Average ..	935	827	1,762

Postal and Electric Telegraph.

There were 1,464 post-offices in New Zealand at the end of 1896.

The number of letters, letter-cards, post-cards, books, and pattern-packets, newspapers, and parcels dealt with during the year, compared with the number handled in 1895, was as under:—

	Total Number dealt with. 1896.	1895.	Increase.
Letters	29,787,763 ..	28,949,936 ..	837,827
Letter-cards	654,290 ..	637,013 ..	17,277
Post-cards	1,231,835 ..	1,201,633 ..	30,202
Books and pattern-packets	12,647,271 ..	10,847,124 ..	1,800,147
Newspapers	13,216,521 ..	12,675,973 ..	540,548
Parcels	186,611 ..	176,206 ..	10,405

The system of postal statistics has recently been modified, and the figures given refer to the total correspondence dealt with counted once: *i.e.*, the total number of letters, &c., posted, *plus* those received from abroad.

The average number of letters, &c., posted per head of the population in each of the past five years was,—

	1892.	1893.	1894.	1895.	1896.
Letters	39·75	38·93	38·02	39·87*	40·77*
Post-cards	2·10	2·10	1·84	1·73	1·65
Books and parcels ..	10·55	10·13	10·39	12·27	17·19
Newspapers	14·04	13·39	12·94	12·95	17·70

The facilities afforded for the transmission of parcels through the Post Office to places within and without the colony have proved of much convenience to the public. The regulations admit of parcels up to 11lb. in weight being sent to almost all the important countries of the world.

The number and weight of parcels dealt with in 1890, 1892, 1894, 1895, and 1896 are given. The word "parcels" in the preceding table includes the parcels herein mentioned:—

1890.		1892.		1894.		1895.		1896.	
No.	Weight.	No.	Weight.	No.	Weight.	No.	Weight.	No.	Weight.
136,327	Lb. 390,521	164,703	Lb. 502,125	174,264	Lb. 540,315	176,206	Lb. 582,193	186,611	Lb. 654,333

Owing to the greatly reduced book-post rates a large number of the lighter packets of the classes formerly sent by parcel-post continue to be diverted to the packet- and sample-post. This fact accounts for the small increase in the number of parcels.

The following table shows the number of parcels exchanged with the United Kingdom, the Australian Colonies, &c., in 1895 and 1896:—

* Including letter-cards.

Country.	Number of Parcels.			
	Received.		Despatched.	
	1896.	1895.	1896.	1895.
United Kingdom and foreign offices *viâ* London	13,730	13,681	3,446	3,524
Victoria	2,579	2,558	1,457	1,457
New South Wales	2,853	2,504	1,568	1,348
Queensland	187	159	225	196
South Australia	206	238	149	176
Tasmania	113	133	280	246
Western Australia	122	64	198	181
Samoa	5	26	84	109
Rarotonga	10	14	54	39
Ceylon	44	47	33	11
Straits Settlements	22	15	..	8
Hawaiian Islands	38	15	28	3
Totals	19,909	19,454	7,522	7,298

The declared value of the parcels received from places outside the colony was £36,438 0s. 1d., on which the Customs duty amounted to £7,202 15s. 1d.

Money Orders and Postal Notes.

The number of offices open for the transaction of money-order business at the end of 1896 was 379.

During 1896, 269,566 money-orders, for a total sum of £902,159 15s. 7d., were issued at the various post-offices in the colony. The money-orders from places beyond New Zealand and payable in the colony numbered 21,761, for the amount of £76,389 11s. 8d.

The number of offices open for the sale of postal notes at the end of 1896 was 433. 370,657 postal notes were sold, value £130,702 14s. 5d. (including £2,532 14s. 11d. commission).

The notes paid numbered 368,781, value £127,942 12s.

Mail-services.

The cost of the various mail-services between England and New Zealand was, in 1896, as follows:—

San Francisco Service.

	£	s.	d.
Payments—			
Subsidies, &c.	24,903	15	1
Interprovincial and other charges ..	3,798	1	5
	£28,701	16	6
Receipts—			
Postages received from England and the Australian Colonies	10,543	11	11
Postages collected in the colony	10,553	9	8
	£21,097	1	7
Loss to the colony	£7,604	14	11

PENINSULAR AND ORIENTAL AND ORIENT LINES SERVICES.

	£	s.	d.
Payments—			
To P. and O. and Orient Lines	3,685	6	3
Transit across Australia	238	6	8
" European Continent ..	587	2	1
Intercolonial services	1,716	19	10
	£6,227	14	10
Receipts—			
Postages collected from England and from foreign offices	932	5	4
Postages collected in the colony	3,221	17	5
	£4,154	2	9
Loss to the colony	£2,073	12	1

The total amount of postages collected and contributions received for all these services in 1896 was £25,251 4s. 4d.

The average number of days in 1896 within which the mails were delivered between London and each of the under-mentioned ports in New Zealand was:—

London to—	San Francisco Service.	P. and O. Line.	Orient Line.
Auckland	34·31	40·54	42·19
Wellington	36·00	40·96	41·81
Dunedin	37·23	42·75	42·94
Bluff	37·98	42·00	42·19

Electric Telegraph.

There were 6,284¾ miles of telegraph-line open at the end of March, 1897, carrying 16,470¾ miles of wire. 2,520,169 telegrams were transmitted during the year; of these, the private and Press messages numbered 2,285,001, which, together with telephone exchange and other telegraph receipts, yielded a revenue of £129,634 15s. 6d.

There were eighteen telephone exchanges and eleven sub-exchanges on the 31st March, 1897. The number of connections increased from 5,143 in March, 1896, to 5,747 in March, 1897. The subscriptions to these exchanges during the financial year amounted to £29,248 19s. 5d.

The capital expended on the equipment, &c., of the several telephone exchanges up to the 31st March, 1897, was £134,299 11s. 4d.

SECTION VII.—FINANCE.

General Government Finance.

For the year ended 31st March, 1897, the actual receipts from all sources amounted to £4,798,708, while the actual expenditure during the same period was £4,509,981. The excess of revenue over expenditure was therefore £288,727. Adding £215,559, the credit balance at the beginning of the year, increases the excess to £504,286. Deducting from this £150,000 paid over to the Public Works Fund, the net surplus on 31st March, 1897, is found to be £354,286.

The chief heads of revenue and expenditure are shown in the following table:—

Revenue and Expenditure.

Revenue.	£	£	*Expenditure.*	£	£
Customs duties	1,818,972		Permanent appropriations—		
Beer duty	68,787		Civil List	24,168	
Stamps	730,237		Charges for Interest and Sinking Fund ...	1,709,469	
Land-tax	272,309		Under special Acts ...	193,334	
Income-tax	105,504		Payments to local bodies	145,455	
Property-tax	63		Annual appropriations for departmental services—		
Railways	1,287,140		Legislative	20,328	
Registration and other fees	50,256		Colonial Secretary ...	101,922	
Marine dues	21,204		Colonial Treasurer ...	29,835	
Miscellaneous	98,373		Minister of Justice ...	123,294	
Territorial revenue ...	272,954		Postmaster-General ...	352,386	
		4,725,799	Commissioner of Trade and Customs ...	91,050	
Other receipts—			Commissioner of Stamps	22,381	
Proceeds ... debentures for Sinking Fund accretions	70,300		Minister of Education Lunacy and Charitable Aid	428,130	
Recovery from Cheviot Estate purchase ...	2,609		Labour Department	54,514	
		72,909	Minister of Mines ...	7,206	
			Minister for Agriculture	18,107	
			Working Railways ...	50,034	
			Minister for Public Works	776,748	
			Defence Department ...	45,371	
			Police Department ...	68,552	
			Department of Lands and Survey	101,330	
			Rates on Crown lands	116,669	
			Services not provided for	509	
			Advances to Settlers Office Management Account	3,169	
				26,000	4,509,981
			Other expenditure—		
			Paid to Public Works Fund		150,000
Surplus on March 31, 1896 ...		215,559	Surplus on March 31, 1897 ...		354,286
		£5,014,267			£5,014,267

Territorial revenue is made up of: Cash land sales, £67,069; deferred-payment land sales, £42,452; pastoral leases, rents, and miscellaneous, £163,433. The expenditure "Under Special Acts" of

the Legislature includes, amongst other items, £20,772 contributed towards the maintenance of the Australasian naval squadron; pensions, compensations, allowances, &c., £34,826; grants and contributions in aid of our universities, £7,000; subsidies to hospitals and charitable institutions, £83,289; and payments to members of both Houses of Parliament, £20,339.

Under the most important heads of ordinary revenue a considerable increase is shown for the year 1896–97 over the figures for 1895–96. Taking these items in order of their magnitude, the advance is shown below:—

Heads of Revenue.	Ordinary Revenue.		Increase.	
	1895–96.	1896–97.	Numerical.	Centesimal.
	£	£	£	Per Cent.
Customs duties	1,649,310	1,818,972	169,662	10·29
Railways	1,182,280	1,287,140	104,860	8·87
Stamps	707,188	730,237	23,049	3·26
Land-tax	271,394	272,309	915	0·34
Income-tax	92,778	105,504	12,726	13·72
Miscellaneous	72,420	*98,373	25,953	35·84
Beer duty	62,658	68,787	6,129	9·78
Registration and other fees ..	48,435	50,256	1,821	3·76
Marine dues	20,560	21,204	644	3·13

* Includes a new item, "Interest on preferred shares of Bank of New Zealand"

The increase shown in the heavy items of Customs duties and Railways revenue is particularly noticeable, being 10·29 per cent. and 8·87 per cent. respectively.

Territorial revenue shows a decline from £291,673 to £272,954, or at the rate of 6·42 per cent.

The total ordinary and territorial revenue is found to have increased from £4,398,751 in 1895–96 to £4,725,799 in 1896–97, or at the rate of 7·44 per cent.; while the population increased at the rate of somewhat over 2 per cent. during the year.

After allowing for alteration in system of charging interest and sinking fund, the charges of the public debt in proportion to the ordinary and territorial revenue are found to have fallen from 41·59 per cent. in 1890–91 to 36·17 per cent. in 1896–97.

Besides expenditure out of revenue, there was also an expenditure out of the Public Works Fund of £427,985, consisting of £207,231 for construction of railways, £64,237 for roads, £70,579 for public buildings, £36,791 for telegraph extension, £14,892 for the Public Works Department, £10,508 for the development of goldfields, £11,600 for lighthouses and harbour-works, £10,554 for contingent defence, £942 on services not provided for, £55 moiety of subsidy to a County Council, £332 for rates on Native lands, and £301 for immigration, while on account of Native land purchases there was a recovery of £37.

£106,930 were spent on roads and bridges, in addition to the foregoing, out of the Lands Improvement Account; and out of the Native Lands Purchase Account £129,000 were expended in buying Native lands; while a further sum of £313,572 was paid in acquiring estates, and expenses connected therewith, under the provisions of the Land for Settlements Act; and £14,953 disbursed for interest on debentures, surveys, roads, &c., on the Cheviot Estate.

On the 31st March last the available ways and means in hand and prospective in respect of the Public Works and other funds amounted as under:—

	£	£
Public Works Fund.		
In hand: Cash	157,362	
Prospective: Aid from Consolidated Fund ..	£200,000	
Balance of million loan ..	125,000	
	325,000	
		482,362
Lands Improvement Account.		
In hand: Cash	136,573	
Prospective: Balance of million loan	62,500	
		199,073*
Native Lands Purchase Account.		
In hand: Cash	95,222	
Prospective: Balance of million loan	62,500	
		157,722*

* In addition to these moneys it is proposed to set aside £50,000 out of the surplus of the Consolidated Fund for the purpose of assisting the requirements of either or both of these accounts.

The expenditure each year since 1884 on services provided for under the Public Works Fund has been:—

(*See Public Works Statement, 1896.*)

Year.	Immigration.	Railways	Roads.	Development of Goldfields.	Telegraph Extension.	Public Buildings.	Lighthouses, &c.	Other Services.	Totals.
	£	£	£	£	£	£	£	£	£
1884-85...	57,148	663,063	317,043	8,029	25,799	117,361	34,033	114,251	1,336,727
1885-86...	11,675	725,496	335,904	9,032	36,010	86,859	133,975	136,435	1,475,386
1886-87...	12,454	615,265	278,617	7,665	18,952	89,598	148,705	162,228	1,333,484
1887-88...	15,598	403,726	219,519	1,016	22,984	90,529	76,825	135,962	966,159
1888-89...	8,791	272,077	106,440	55	12,047	34,592	47,593	132,344	613,939
1889-90...	867	289,572	84,126	284	16,346	35,473	9,434	46,362	482,464
1890-91...	1,823	180,020	71,289	821	16,292	22,819	2,666	39,026	334,756
1891-92 ..	817	154,416	101,605	2,257	27,773	34,791	7,347	62,495	391,501
1892-93...	242	220,894	105,506	3,811	29,245	31,101	11,205	60,502	462,506
1893-94...	343	176,304	147,418	5,272	16,127	44,032	6,588	10,713	406,797
1894-95...	101	247,545	61,757*	5,865	19,229	54,190	3,145	9,578	401,410
1895-96...	Cr. 10	197,105	66,774*	9,345	35,538	76,240	7,409	19,928	412,329
1896-97...	301	207,231	64,292*	10,508	36,791	70,579	11,600	26,683	427,985

* Exclusive of moneys spent on roads under Lands Improvement, Native Lands Purchase, and Government Loans to Local Bodies Accounts: £103,076 in 1894-95, £162,757 in 1895-96, and £173,358 in 1896-97.

Loans for Government Advances to Settlers.

A notable feature in the legislation of the year 1894 was the passing of the Government Advances to Settlers Act, of which a description will be found in the next part of this volume. The Act authorised the raising of three millions sterling, in sums not exceeding a million and a half in each financial year, within two years from the date of the passing of the Act. The Loan Agents in London accordingly called for tenders for a million and a half of 3-per-cent. inscribed stock, to be lodged at the Bank of England on or before the 3rd May, 1895. The average price realised was £94 8s. 9d., applications having been made for £5,960,400, at prices varying from £100 to £90, of which about 33 per cent. of the tenders at £94 8s. were accepted, those above that price being allotted in full. The total cash receivable was £1,416,601 2s. (For particulars of terms and transactions see article by the Superintendent in Part III.)

New Zealand Consols.

Another important financial Act, termed the New Zealand Consols Act, was also passed in 1894, with the intention of providing further means of investment for the savings of persons resident in the colony. Steady progress is being made in this class of deposits, showing that the public are recognising the system as a means of safe and profitable investment of their savings. It is singular that deposits of moneys belonging to trust funds or minors are not more freely made. It is thought that the advantage of such an investment at a fair rate of interest and of a permanent character is not widely enough known.

Up to the 31st March, 1897, deposits amounting to £297,405 have been received in sums ranging from £5 to £150,000.

The system of making deposits in New Zealand Consols is fully described in Part III.

Aid to Public Works and Land Settlement.

"The Aid to Public Works and Land Settlement Act, 1896," empowered the Colonial Treasurer to raise £1,000,000: in aid of the Public Works Fund to the extent of £500,000, and the Lands Improvement Account and the Native Lands Purchase Account, £250,000 each. The sum of £750,000, bearing interest at 3½ per cent. per annum, has been raised locally at par (£500,000 being issued with an alternative currency of ten or twenty-five years); the balance of £250,000 may possibly be placed upon the London market in the form of 3 per cent. inscribed stock.

Public Debt.

The gross public debt of the colony on 31st March, 1897, was £44,366,618, an increase of £1,315,838 on the amount owing at the end of the preceding year. A detailed statement of particulars relative to the various loans is supplied.

PUBLIC DEBT ON 31ST MARCH, 1897.

Loans.	Debentures and Stock.		Amount of Sinking Funds accrued.	Net Indebtedness.	Annual Charge.				
					Interest.		Sinking Fund.		Total.
	Amount in Circulation.	When redeemable.			Rate.	Amount.	Rate.	Amount.	
Under Acts of the Colonial Government—	£		£ s. d.	£ s. d.	₱ c.	£ s. d.	₱ c.	£ s. d.	£ s. d.
"New Zealand Loan Act, 1863"	273,800	15 July, 1914	(1)107,976 19 6	165,823 0 6	5	13,690 0 0	1	2,738 0 0	16,428 0 0
"Consolidated Loan Act 1867"	565,500	£552,500 by annual drawings £13,000 15 April, 1913	...	552,500 0 0 13,000 0 0	5 4	27,625 0 0 520 0 0	... ...	... ...	28,145 0 0
"Defence and other Purposes Loan Act, 1870"	100,000	£25,000 1 July, 1910 £75,000 15 April, 1913	...	25,000 0 0 75,000 0 0	4½ 4	1,125 0 0 3,000 0 0	...	...	4,125 0 0
"Immigration and Public Works Loan Act, 1870"	1,400,000	£372,100 15 April, 1913 *£1,000,000 1 June, 1907 £27,900 15 April, 1913	(2)481,573 10 5	372,100 0 0 518,426 9 7 27,000 0 0	4 4 4½	14,884 0 0 40,000 0 0 1,255 10 0	... 2·4 ...	... 24,000 0 0 ...	80,139 10 0
General Purposes Loan Act, 1873"	85,500	£18,500 15 Oct., 1913 £12,300 15 May, 1914 £54,700 28 Nov., 1914	..	18,500 0 0 12,300 0 0 54,700 0 0	4 4 5	740 0 0 492 0 0 2,735 0 0	...	...	3,967 0 0
"New Zealand Consolidated Stock Act, 1877"	36,838,089	£29,150,302 1 Nov., 1929 £6,161,167 1 Jan., 1940 £1,526,620 1 April, 1945	...	29,150,302 0 0 6,161,167 0 0 1,526,620 0 0	4 3½ 3	1,166,012 1 7 215,640 16 11 45,798 6 0	...	...	1,427,451 4 6
"New Zealand Consolidated Stock Act, 1884"— Colonial Issue... ...	2,420,932	£263,032 28 May, 1897 £40,000 22 May, 1898 £1,306,100 28 May, 1898 £253,200 28 May, 1898 £558,600 28 May, 1898	†(3)85,259 1 3	1,609,132 0 0 253,200 0 0 473,340 18 9	4½ 4 3½	72,410 18 10 10,128 0 0 19,551 0 0	...	...	102,089 18 10
"District Railways Purchasing Act, 1885"	188,600	£40,000 1 July, 1909 £101,600 1 April, 1905 £47,000 1 April, 1899	...	40,000 0 0 101,600 0 0 47,000 0 0	6 4 5	2,400 0 0 4,064 0 0 2,350 0 0	...	...	8,814 0 0
"District Railways Purchasing Act Amend't Act, 1886"	35,000	28 May, 1898	...	35,000 0 0	3½	1,225 0 0	...	...	1,225 0 0
Carried forward ...	41,907,421	...	674,809 11 2	41,232,611 8 10	...	1,645,646 13 4	...	26,738 0 0	1,672,384 13 4

*Authorised and guaranteed by Act of Imperial Parliament. Only £200,000 of the amount has actually been issued to the public; the unsold debentures are available for the purpose of obtaining temporary advances from time to time. †Represents accrued Sinking Fund upon the amount borrowed under "The Government Loans to Local Bodies Act, 1886," which has been converted into Consolidated Stock Debentures.

(1) Invested: New Zealand Inscribed Stock, 4 per cent, £106,685 10s. 3d.; New Zealand 3½ per-cent. Stock, £1,291 9s. 3d. (2) Invested: On Imperial-guaranteed Million Loan: New South Wales, £125,579 12s. 1d.; Victoria, £129,785 2s. 9d.; South Australia, £85,049 4s. 10d.; Canada, £141,159 10s. 9d. (3) Invested: New Zealand Government, £19,550; Mortgages, £65,700; and £9 1s. 3d. in cash.

PUBLIC DEBT ON 31ST MARCH, 1897—*continued.*

Loans.	Debentures and Stock.		Amount of Sinking Funds accrued.	Net Indebtedness.	Annual Charge.				
	Amount in Circulation.	When redeemable.			Interest.		Sinking Fund.		Total.
					Rate.	Amount.	Rate.	Amount.	
	£		£ s. d.	£ s. d.	₱ c.	£ s. d.	₱ c.	£ s. d.	£ s. d.
Brought forward ...	41,907,421	...	674,809 11 2	41,232,611 8 10	...	1,645,646 13 4	...	26,738 0 0	1,672,384 13 4
Under Acts of the Colonial Government—*continued.*									
"Government Loans to Local Bodies Act, 1886"	141,800	31 December, 1900 ...	(1) 23,597 19 9	118,202 0 3	3½	4,963 0 0	1½	*15,811 10 0	20,774 10 0
"Naval and Military Settlers' and Volunteers' Land Act, 1892"	27,226	31 October, 1899 ...	...	27,226 0 0	4½	1,225 3 5	...	...	1,225 3 5
"Native Land Purchases Act, 1892"	149,700	31 October, 1899 ...	...	140,000 0 0 9,700 0 0	4½ 5	6,300 0 0 485 0 0	...	...	6,785 0 0
"Land for Settlements Act, 1892"	45,276	31 October, 1899 ...	...	45,276 0 0	4½	2,037 8 5	...	...	2,037 8 5
"Land for Settlements Act, 1894"	455,090	31 October, 1899 ...	...	134,100 0 0 320,990 0 0	4 3½	5,364 0 0 11,234 13 0	...	...	16,598 13 0
"Lands Improvement and Native Lands Acquisition Act, 1894"	500,000	30 September, 1908 ...	...	383,000 0 0 117,000 0 0	4 3½	15,320 0 0 4,095 0 0	...	...	19,415 0 0
"New Zealand Consols Act, 1894"	297,405	1 February, 1910 ...	...	297,405 0 0	3½	10,409 3 6	...	...	10,409 3 6
"Aid to Public Works and Land Settlement Act, 1896"	750,000	£250,000 1 Feb., 1902 £500,000 15 Aug., 1921	...	750,000 0 0	3½	26,250 0 0	...	...	26,250 0 0
Carried forward ...	44,273,918	...	698,407 10 11	43,575,510 9 1	...	1,733,330 1 8	...	42,549 10 0	1,775,879 11 8

(1) Invested: New Zealand Government, £22,699, and £898 19s. 9d. in cash.

* Sinking Fund payable on £1,054,100, the total amount borrowed under "The Government Loans to Local Bodies Act, 1886," to 31st March, 1897; the Land Assurance Fund is also charged with half per cent. as a contribution towards the Sinking Fund.

PUBLIC DEBT ON 31ST MARCH, 1897—*continued.*

Loans.	Debentures and Stock.		Amount of Sinking Funds accrued.	Net Indebtedness.	Annual Charge.				
					Interest.		Sinking Fund.		Total.
	Amount in Circulation.	When redeemable.			Rate.	Amount.	Rate.	Amount.	
	£		£ s. d.	£ s. d.	₱c.	£ s. d.	₱c.	£ s. d.	£ s. d.
Brought forward ...	44,273,918	...	698,407 10 11	43,575,510 9 1	...	1,733,330 1 8	...	42,549 10 0	1,775,879 11 8
Under Acts or Ordinances of the late Provincial Governments—									
"Lyttelton and Christchurch Railway Loan Ordinance, 1860"	*4,500	1 January, 1897... ...	(1) 9,090 17 11	*Cr.* 4,590 17 11	...	...	...	...	...
"Canterbury Loan Ordinance, 1862"	16,000	£3,800 2 Jan., 1915 £12,200 2 July, 1916	(2) 9,749 16 2	6,250 3 10	6	960 0 0	1	160 0 0	1,120 0 0
"Otago Loan Ordinance, 1862"	72,200	1 July, 1898	(3) 97,046 3 0	*Cr.* 24,846 3 0	6	4,332 0 0	†	...	4,332 0 0
Totals	44,366,618	...	814,294 8 0	43,552,323 12 0	...	1,738,622 1 8	...	42,709 10 0	1,781,331 11 8

Treasury bills amounting to £730,000, issued in anticipation of revenue, are not included.

* Balance of debentures not yet sent in for payment. † Further contributions of sinking fund are not required.

(1) Invested: County of Waitemata, £320; County of Tauranga, £510; Borough of Brunner, £450; Wellington-Manawatu Railway, £7,015; Waimakariri-Ashley Water-supply Board, £20; and £775 17s. 11d. in cash.

(2) Invested: New Zealand Government, £7,525; County of Tauranga, £60; Borough of Tauranga, £200; Borough of Hokitika, £350; Borough of Brunner, £40; County of Waitemata, £20; Wellington-Manawatu Railway, £480; Westport Harbour Board, £510; Waimakariri-Ashley Water-supply Board, £270; and £294 16s. 2d. in cash.

(3) Invested: New Zealand Government, £56,201; County of Tauranga, £890; County of Waitemata, £240; City of Dunedin, £3,500; Borough of Thames, £2,200; Borough of Tauranga, £2,000; Borough of Hokitika, £1,730; Borough of Hawera, £4,000; Borough of Brunner, £480; Borough of Palmerston North, £1,100; Borough of Patea, £5,000; Waimakariri-Ashley Water-supply Board, £700; Wellington-Manawatu Railway, £9,960; Westport Harbour Board, £7,140; and £2,105 3s. in cash.

The total increase by the issue of debentures and conversion operations during the year was £1,402,906. On the other hand, debentures amounting to £87,068 were redeemed, leaving, as stated before, a net increase to the public debt of £1,315,838. The following details show at a glance the increase in the public debt:—

	£		£	£
Debentures issued for—		Debentures redeemed—		
Aid to public works and land settlement	750,000	Consolidated Stock Act, 1884	22,968	
Loans to local bodies	93,800	Lyttelton and Christchurch Railway Loan Ordinance, 1860 ...	4,700	
Land improvement and purchase of Native lands ...	52,000	Auckland Loan, 1863 ...	16,800	
Purchase of land for settlement	297,300	Consolidated Loan Act, 1867	42,600	
Sinking-fund accretions ...	70,300			87,068
Inscription—				
New Zealand Consols	136,015	Gross debt on 31st March,		
Conversion operations... ...	,491	1897		44,366,618
	1,402,906			
Gross debt, 31st March, 1896	43,050,780			
	£44,453,686			£44,453,686

Of the total amount of outstanding public debt at the end of March, 1897—viz., £44,366,618—more than thirty-one millions sterling bore interest at the rate of 4 per cent., and over eight millions sterling at 3½ per cent. The following are the rates of interest payable on the complete public debt:—

Rates of Interest.	Amount at each Rate. £
6 per cent.	128,200
5 per cent.	937,700
4½ per cent.	1,874,534
4 per cent.	31,513,102
3½ per cent.	8,381,962
3 per cent.	1,526,620
Nil	4,500*
Total	£44,366,618

The total amount of interest payable to the bondholders on the full amount of the public debt, as quoted above, is £1,738,622, which gives an average rate of £3 18s. 5d. per cent.

The actual payments during three years for interest and sinking fund are shown hereunder:—

Year ended 31st March.	Amounts actually paid for Interest and Sinking Fund.				
	Public Debt.			Treasury Bills.	Total.
	Interest.	Sinking Fund.	Total.	Interest.	
	£	£	£	£	£
1895 ..	1,619,925	57,979	1,677,904	38,985	1,716,889
1896 ..	1,602,933	41,183	1,644,116	39,659	1,683,775
1897 ..	1,630,577	41,858	1,672,435	37,034	1,709,469

* Debentures matured not yet sent in for payment.

The securities in which the sinking funds were held are specified in the statement following:—

STATEMENT of the SECURITIES in which the SINKING FUNDS of the several LOANS were invested on the 31st March, 1897.

Investments in—	£	s.	d.
New Zealand 5-per-cent. Debentures	20,250	0	0
" 4½-per-cent. Debentures	38,891	0	0
" 4-per-cent. Debentures	4,585	0	0
" 4-per-cent. Inscribed Stock	106,685	10	3
" 3½-per cent. Inscribed Stock ..	1,291	9	3
Treasury Bills, 3½-per-cent.	42,249	0	0
County of Tauranga 5-per-cent. Debentures ..	1,460	0	0
County of Waitemata 6-per-cent. Debentures ..	580	0	0
City of Dunedin 7-per-cent. Mortgage Debentures ..	3,300	0	0
Borough of Brunner 6-per-cent. Debentures ..	970	0	0
Borough of Hawera 6-per-cent. Debentures ..	4,000	0	0
Borough of Hokitika 6-per-cent. Debentures ..	2,080	0	0
Borough of Palmerston North 5-per-cent. Debentures	1,100	0	0
Borough of Patea 6-per-cent. Debentures	5,000	0	0
Borough of Thames 5½-per-cent. Debentures ..	2,200	0	0
Borough of Tauranga 5-per-cent. Debentures ..	2,200	0	0
Westport Harbour Board 5-per-cent. Debentures ..	7,650	0	0
Wellington and Manawatu Railway Company 5-per-cent. Debentures	17,455	0	0
Waimakariri-Ashley Water-supply 5-per-cent. Debentures	990	0	0
Canada 3-per-cent. Stock	28,936	19	1
Canada 3½-per-cent. Stock	34,022	11	8
Canada 4-per-cent. Stock	60,000	0	0
Canada 4-per-cent. Debentures	18,200	0	0
New South Wales 3-per-cent. Stock	15,899	9	10
New South Wales 3½-per-cent. Stock	83,393	15	8
New South Wales 4-per-cent. Stock	5,486	6	7
New South Wales 4-per-cent. Debentures	20,800	0	0
South Australia 3-per-cent. Stock	18,281	8	5
South Australia 3½-per-cent. Stock	37,216	16	0
South Australia 4-per-cent. Stock	4,851	0	5
South Australia 4-per-cent. Debentures	24,700	0	0
Victoria 3½-per-cent. Stock	63,551	5	5
Victoria 4-per-cent. Stock	43,233	17	4
Victoria 4-per-cent. Debentures	23,000	0	0
Mortgages	65,700	0	0
	810,210	9	11
Cash balance on 31st March, 1897 ..	4,083	18	1
Total	£814,294	8	0

The net public debt, after deducting the accrued sinking fund (£814,294), was on 31st March, 1897, £43,552,324, an increase of £1,280,435 during the year. The net indebtedness per head of population for 1896–97 is greater than previously. In March, 1890, it stood at £60 5s. 3d.; in 1891, £59 11s. 10d.; in 1892, £59 2s.; in 1893, £58 2s. 7d.; in 1894, £57 8s. 10d.; in 1895, £57 9s. 9d.; in 1896, £60 2s. 4d.; and in 1897, £60 13s. 9d.

Years ended 31st March.	Amount of Debentures and Stock in Circulation.	Gross Indebtedness per Head of European Population.	Amount of Sinking Fund accrued.	Net Indebtedness.	Net Indebtedness per Head of European Population.
	£	£ s. d.	£	£	£ s. d.
1890	38,667,950	62 10 1	1,386,185	37,281,765	60 5 3
1891	38,830,350	61 19 4	1,487,042	37,343,308	59 11 10
1892	38,713,068	60 14 8	1,037,862	37,675,206	59 2 0
1893	39,257,840	59 16 7	1,113,770	38,144,070	58 2 7
1894	39,826,415	58 17 0	951,924	38,874,491	57 8 10
1895	40,386,964	58 11 6	751,932	39,635,032	57 9 9
1896	43,050,780	61 4 5	778,891	42,271,889	60 2 4
1897	44,366,618	61 16 5	814,294	43,552,324	60 13 9

The debt of the colony as above stated does not include the unpaid loans raised by the several local bodies, amounting at the end of March, 1896, to £6,737,578, of which sum £5,461,075 were raised outside the colony. These will be referred to in dealing with the finance of local bodies.

Of the existing loans some portions were raised by the several Provincial Governments, while others represent loans raised for the purpose of paying off provincial liabilities. It is now almost impossible to ascertain the exact expenditure by these Governments on public works, or the allocation of the proceeds of the loans raised by them.

The highest and lowest London prices for the New Zealand 4, 3½, and 3-per-cent. stock, taken over a range of ten years, are quoted:—

QUOTATIONS, NEW ZEALAND STOCK.

Year	4 per Cents. Highest.	4 per Cents. Lowest.	3½ per Cents. Highest.	3½ per Cents. Lowest	3 per Cents. Highest.	3 per Cents. Lowest.
1887	100⅝	93⅝	..	..	..	..
1888	104½	96¼	..	..	..	..
1889	109¼	99⅝	..	..	..	..
1890	109⅛	102¼	98⅜	93¼	..	..
1891	107½	100	98¼	91⅛	..	..
1892	106⅜	100	98	91½	..	..
1893	107½	97	97½	90	..	..
1894	109⅞	105⅜	103½	96¼	..	..
1895	113¼	105⅝	107½	100	95⅜	91
1896	118¼	106½	110⅜	101½	103½	90

The following table shows the debt of each of the Australasian Colonies:—

Colony.	Amount of Debt.	Accrued Sinking Fund.	Net Indebtedness.	Rate of Net Indebtedness per Head of Population at End of Year.
	£	£	£	£ s. d.
Queensland (Dec., 1895)	31,873,934	..	31,873,934	69 4 2
New South Wales (30 June, 1896) ..	62,411,373	..	62,411,373	48 7 10
Victoria (Dec., 1895)..	46,828,517	..	46,828,517	39 12 6
South Australia (Dec., 1895)	23,414,250	195,316	23,218,934	65 16 10
Western Australia (June, 1895) ..	3,992,681	154,785	3,837,896	42 17 2
Tasmania (Dec., 1896)	8,251,778	128,662	8,123,116	48 18 0
New Zealand (March, 1897)	44,366,618	814,294	43,552,324	60 13 9

The amount of net indebtedness per head of population in 1895 was thus greater in Queensland and South Australia than that for New Zealand in 1897.

The burden of a public debt depends greatly on the measure in which it is expended on reproductive works, and on the degree of prosperity enjoyed by the people. The generally rugged character of this country, and the natural difficulties appertaining to the sites of many of the towns, soon necessitated a large outlay on roads and public works. The need was fully recognised, and to some extent met, by the Provincial Governments, which have justly received great credit for their far-seeing and liberal exertions. A great deal of road-making, often of a very costly character, was accomplished, harbour and other improvements begun, and immigration encouraged. Some railways were made in Canterbury, Otago, and Southland. The City of Christchurch and the Canterbury Plains were connected with the Port of Lyttelton by a railway, which required the construction of a long and very costly tunnel through the intervening range of hills. In Otago, private enterprise, backed by the guarantee of the Provincial Government, built a railway from Dunedin to Port Chalmers, and some miles of line were made in Southland from the town of Invercargill into the interior; but no general and comprehensive scheme of public works could be carried out by the separate exertions of the Provincial Governments. In 1870, therefore, the General Government brought forward its public-works and immigration policy, by which it was proposed to raise a loan of ten millions for the construction of main trunk railways, roads, and other public works of importance to the colony as a whole, as well as for the promotion of immigration on a large scale, the expenditure to be spread over a period of ten years. This policy was accepted by the Legislature, and embodied in "The Immigration and Public Works Act, 1870."

The demands for local railways and other works soon caused the original proposals to be exceeded, and entailed an expenditure at a much more rapid rate and to a far greater amount than was originally contemplated. Although many of the works undertaken have been directly unremunerative, yet the effect of the policy, as a whole, has been largely to develop the settlement of the country, and

to increase enormously the value of landed property; land, in parts which before the construction of railways was valued at from £1 to £2 per acre, having been subsequently sold at prices varying from £10 to £20 per acre. Moreover, the railway and telegraph-lines yield a revenue which covers a large portion of the interest on their cost after paying working-expenses.

The following may be stated as approximately representing the loan expenditure by the General Government on certain public works and immigration to the 31st March, 1897:—

	£		£
Telegraphs	771,351	Public buildings, including schools	2,092,008
Development of goldfields	598,159*	Coal-mines and thermal springs	25,435
Immigration	2,146,945		
Roads and bridges ..	4,525,345		
Land-purchases ..	2,597,312†		
Lighthouses, harbours, and defence works ..	929,113	Railways (by the Provincial and General Governments)	16,411,189‡

The above several items of expenditure give a total of £30,096,857. To this must be added so much of the loans raised by the various local bodies as has been devoted to the construction of harbours, roads, and other public works, together with the amounts expended out of loan by the Provincial Governments on immigration, and public works other than railways. The expenditure on directly reproductive works—railways, telegraphs, and waterworks on goldfields—has been £17,780,699. Expenditure on land is also partly reproductive, and that on immigration, roads, bridges, and lighthouses indirectly so.

The expenditure on railway-works has been kept within very narrow limits during the last few years. The railway expenditure during each of the five-yearly periods since the initiation of the public-works policy has been as follows:—

	£
1st July, 1870, to 30th June, 1875	3,575,362
1st July, 1875, to 31st March, 1880	4,919,712
1st April, 1880, to 31st March, 1885	3,120,680
1st April, 1885, to 31st March, 1890	2,308,319
1st April, 1890, to 31st March, 1895	978,498
For the year ended 31st March, 1896	197,105
And for the year ended 31st March, 1897	206,897
Total	15,306,573

This great diminution in expenditure has necessarily involved proceeding with the railways at a very much slower rate, and New Zealand's expenditure on railways is now the lowest per head of the population of any of the Australasian Colonies. The following table shows the cost of railway-works, the mileage, the average cost per mile, the population, and the cost per head of the population in the several colonies referred to:—

* Including £177,861 spent under "The Government Loans to Local Bodies Act Amendment Act, 1891," and £300,830 out of the Lands Improvement Account.

† Including moneys spent in purchase of Cheviot Estate, £260,220; out of the Native Land Purchase Account, £491,980; and under Land for Settlements Acts, £547,296.

‡ Including £1,104,281 spent on railways by Provincial Governments, of which sum £82,259 was paid for the Dunedin and Port Chalmers line.

Colonies.	Cost of Railway-works.	Mileage (average open).	Average Cost per Mile.	Population	Cost per Head of Population	Year ended
	£		£		£ s. d.	
South Australia	13,734,666	1,868	7,353	356,000	38 11 7	30th June, 1896.
Queensland ..	16,759,406	2,380	7,024	460,550	36 7 10	30th June, 1896.
Victoria ..	38,108,151	3,121	12,204	1,177,474	32 7 3	30th June, 1896.
New South Wales	36,852,194	2,531	14,559	1,289,770	28 11 5	30th June, 1896.
Tasmania ..	3,524,051	420	8,395	160,834	21 18 3	31st Dec., 1896.
New Zealand ..	15,577,392	2,016	7,719	717,649	21 14 1	31st Mar., 1897.
Western Australia	2,316,824	580	3,974	122,420	18 18 6	30th June, 1896.

Taxation.

The direct taxation prior to 1892 consisted of a property-tax of 1d. in the pound on all assessed real and personal property (with an exemption of £500), and the stamp duties; but in 1891 a Land and Income Assessment Act was passed repealing the property-tax. A full description of the system of the land- and income-tax is given by the Commissioner in a special article in Part III. of this book, and to this attention is particularly directed. The leading features only are briefly stated here.

The Assessment Act of 1891 provides for an ordinary land-tax on the actual value of land, and an owner is allowed to deduct any amount owing by him secured on a registered mortgage. Under the original Act the deduction for improvements might not exceed £3,000; but, by the Amendment Act of 1893, the value of all improvements whatsoever is exempted from liability to land-tax. Besides this, an exemption of £500 is allowed when the balance, after making deductions as above stated, does not exceed £1,500; and above that a smaller exemption is granted, but ceases when the balance amounts to £2,500. Mortgages are subject to the land-tax. The revenue from the ordinary land-tax is, in round numbers, about £197,000 per annum. The rate of ordinary land-tax for 1896–97 was 1d. in the pound. Unoccupied Native lands are now taxed ½d. in the pound.

In addition to the ordinary land-tax, there is a graduated land-tax which commences when the unimproved value is £5,000. For the graduated land-tax, the present value of all improvements is deducted; but mortgages are not deducted. The Act of 1893, while reducing the ordinary taxation on land by exempting all improvements, increased the graduated tax, and the revised rates are now one-eighth of a penny in the pound sterling when the value is £5,000 and is less than £10,000, from which the rate increases with the value of the property by further steps of an eighth of a penny until the maximum of 2d. in the pound is reached, payable when the value is £210,000, or exceeds that sum.

This graduated tax yields, in round numbers, £75,000 per annum, which is not included in the sum of £197,000 given above. Twenty per cent. additional tax is levied in case of persons who have been absent from the colony for three years or more prior to the

passing of the yearly taxing Act. This amounts to about £1,000, and is included in the £75,000 shown above.

Income-tax is levied on all incomes above £300, and from taxable incomes a deduction of £300 is made. The rate of income-tax for 1896–97 was 6d. in the pound on the first taxable £1,000, and 1s. in the pound on taxable incomes over £1,000.

Companies pay 1s. in the pound, and are not allowed the £300 exemption. The Act of 1893 further disallowed the £300 exemption in the case of persons not domiciled in New Zealand.

The indirect taxation is made up of Customs duties, and excise duty on beer made in the colony. The following statement shows the amount raised by taxation in each of the past fifteen years :—

	Amount of Revenue raised by Taxation. £	Amount per Head of Population (excluding Maoris). £ s. d.
1882	1,956,557 ..	3 16 10
1883	1,957,080 ..	3 13 11
1884	1,815,674 ..	3 5 9
1885	2,016,730 ..	3 10 10
1886	1,882,050 ..	3 4 8
1887	1,876,235 ..	3 2 11
1888	2,031,658 ..	3 7 1
1889	2,090,405 ..	3 8 4
1890	2,173,985 ..	3 10 0
1891	2,179,739 ..	3 9 2
1892	2,339,511 ..	3 12 10
1893	2,353,250 ..	3 11 2
1894	2,300,350 ..	3 7 9
1895–96	2,335,761 ..	3 7 1
1896–97	2,521,911 ..	3 11 0

As the Maoris contribute somewhat to the Customs revenue, an allowance should be made on that account to ascertain more correctly the amount of taxation per head of the rest of the people. By including Maoris the Customs and excise duties per head of the rest of the population would be reduced by 2s. 10d. for the year 1896–97. If this amount be deducted from the taxation per head given for that year, the rate would be reduced from £3 11s. to £3 8s. 2d. This latter rate may fairly be used for comparison with the rates in the neighbouring colonies.

The following were the rates of taxation per head in the Australasian Colonies in 1895, specifying the proportions derived from Customs and other taxes :—

Colonies.	Rate of Taxation per Head of Mean Population.			Proportion of Taxation from Customs Duties.	Ratio of Taxation by Customs to Value of Imports.
	Customs.	Other Taxes.	Total.		
	£ s. d.	£ s. d.	£ s. d.	Per Cent.	Per Cent.
Queensland ..	2 14 8	0 12 0	3 6 8	81·96	23·32
New South Wales	1 8 10	0 11 0	2 0 7	71·13	11·41
Victoria ..	1 10 8	0 15 4	2 6 0	66·70	14·51
South Australia	1 9 10	0 14 9	2 4 7	66·96	9·32
Western Australia	6 14 3	0 14 5	7 8 8	90·32	16·47
Tasmania ..	1 18 3	1 0 1	2 18 4	65·54	27·81
New Zealand ..	2 7 5	0 19 8	3 7 1	70·61	25·77

The various local bodies levied taxation during the year ended 31st March, 1896, to the amount of £686,089, or 19s. 8d. per head of European population. Of the total sum, £409,204 were raised by general rates, £183,698 by special and separate rates, £75,060 by licenses, and £18,127 by other taxes.

Local Governing Bodies.

For purposes of local government New Zealand is divided into counties and boroughs. Although the boroughs lie geographically within the counties, yet by the law they are not included in them. On the 31st March, 1896, the counties numbered 81. The number is increased from time to time as need is found for further division. In the year 1878 there were only 63 counties. Interior to the counties are the road and town districts, but much of the country is outlying, many road districts having been merged, especially on goldfields territory. There were, however, 242 road districts in existence in March, 1896, and 40 town districts. One of these latter is the special Town District of Rotorua, constituted under "The Thermal-Springs Districts Act, 1881." Besides the above there were 31 river protective districts, 1 drainage district (Christchurch), 1 water-supply district (Waimakariri-Ashley), and 10 land drainage districts under the Land Drainage Act of 1893. The Harbour Boards numbered 25.

These bodies levied rates in the financial year 1895–96, to the amount of £592,902, of which £409,204 consisted of general rates, and £183,698 special and separate rates. £75,060 was raised by licenses, and £18,127 in other taxes, making £686,089 altogether, which sum is equivalent to 19s. 8d. per head of the mean European population of the colony. In the year 1894–95 the average per head of local taxation was 19s. 10d. or 2d. more than in 1895–96.

Taxation by Local Bodies, 1895–96.

Local Bodies.	Rates.		Licenses.	Other Taxes.	Total.
	General.	Special and Separate.			
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Counties* ...	145,337 1 5	40,780 5 7	18,410 11 0	11,199 11 9	215,727 9 9
Boroughs* ...	124,269 19 7	129,375 19 2	50,135 8 2	5,393 1 1	309,174 8 0
Town Boards* ...	3,634 5 7	168 11 3	4,381 10 1	218 1 6	8,402 8 5
Road Boards* ...	78,412 10 9	11,350 0 5	2,132 10 2	1,316 4 9	93,211 6 1
River Boards* ...	5,720 0 10	1,659 12 11	...	...	7,379 13 9
Land-drainage Boards* ...	192 10 5	73 15 3	...	...	266 5 8
Harbour Boards†	28,443 2 10	...	...	...	28,443 2 10‡
Christchurch Drainage Board†	23,194 7 10	...	...	...	23,194 7 10
Waimakariri-Ashley Water-supply Board	...	290 1 3	...	...	290 1 3
Totals ...	409,203 19 3	183,698 5 10	75,059 19 5	18,126 19 1	686,089 3 7§

* For year ended 31st March, 1896. † For year ended 31st December, 1895.
‡ Wharfage dues, charges, fees, tolls, rents, &c., amounting to £248,718 3s. 2d., have not been classed as taxation. § Equal to 19s. 8d. per head of the mean European population of the colony for the financial year 1895-96.

The receipts (distinguishing revenue from other sources of income) and expenditure of the various local bodies, with the amount of rates collected, and the amount of indebtedness on account of loans for each of the past sixteen years, are shown in the following table:—

LOCAL GOVERNING BODIES.—RATES, RECEIPTS, EXPENDITURE, AND LOANS, 1881 TO 1896.*

Year.	Receipts of Local Bodies.				Expenditure of Local Bodies.†	Outstanding Loans of Local Bodies (excluding Government Loans, for which see the following Columns).	Government Loans to Local Bodies.	
	Revenue.		Receipts not Revenue.	Total Receipts.			Under "The Roads and Bridges Construction Act, 1882."	Under "The Government Loans to Local Bodies Act, 1886" (including Debentures under the Roads and Bridges Construction Act, converted).
	From Rates.	From Government and other Sources.						
	£	£	£	£	£	£	£	£
Year ended 31st March, 1881	249,087	814,142	889,705	1,952,934	1,871,752	3,039,807	..	..
" " 1882	297,328	694,652	419,608	1,411,588	1,637,337	3,277,584	..	..
" " 1883	327,129	600,450	311,466	1,239,045	1,397,863	3,540,046	..	..
" " 1884	398,659	744,527	331,994	1,475,180	1,499,117	3,962,330	77,439	..
" " 1885	401,393	841,895	430,561	1,673,849	1,653,706	4,313,223	123,086‡	..
" " 1886	410,639	882,618	514,728	1,807,985	1,644,706	4,943,270	134,534	..
" " 1887	434,237	790,063	992,633	2,216,933	1,885,001	5,620,747	113,072	..
" " 1888	433,832	795,067	511,594	1,740,493	1,819,787	5,812,803	18,635	191,687
" " 1889	445,929	676,428	316,139	1,438,496	1,560,605	5,892,050	10,495	273,289
" " 1890	460,303	707,725	206,688	1,374,716	1,476,540	5,978,059	9,676	319,603§
" " 1891	463,581	662,765	236,902	1,363,248	1,381,320	6,042,693	4,317	367,715
" " 1892	488,824	693,296	214,124	1,396,244	1,400,467	6,081,934	4,245	449,532
" " 1893	508,157	709,676	340,538	1,558,371	1,482,548	6,203,869	3,465	525,173
" " 1894	551,412	681,831	623,038	1,856,281	1,589,124	6,614,824	2,685	547,679
" " 1895	581,868	683,857	328,798	1,594,523	1,584,518	6,685,510	2,015	621,903
" " 1896	592,902	737,917	269,145	1,599,964	1,627,079	6,737,578	1,442	667,451

*The figures for the Christchurch Drainage Board and the Harbour Boards included in this table are for the calendar years ended three months previous to the financial years.

†Not including balances, contractors' deposits returned, amounts paid to sinking funds and for redemption of debentures.

‡On the 30th June. §In February.

The indebtedness of the local bodies, outside moneys repayable to the General Government by instalments under "The Roads and Bridges Construction Act, 1882," and moneys advanced under "The Government Loans to Local Bodies Act, 1886," has thus increased during the period included in the table from about three to more than six and a half millions sterling, and in the ten years, April, 1886, to March, 1896, from £4,943,270 to £6,737,578.

Of the total indebtedness in March, 1896, the debt of the Harbour Boards formed the largest item, £3,686,959, while the Borough Councils owed £2,777,495. It will be seen from the table following (p. 250) that the accrued sinking funds for all loans of local bodies amounted to £599,815, leaving a net indebtedness of £6,137,763, exclusive of the sums owing to the General Government, and that the total annual charge for interest and sinking fund stood at £398,828.

In a third table (p. 251) will be found a classification of the amounts raised by loan, according to the rates of interest paid, distinguishing loans raised in the colony from those raised abroad. It will be noticed that the amount raised abroad (£5,461,075) is nearly five times as great as that raised in New Zealand (£1,276,503). The lowest rate of interest paid was 3 per cent., but the large sum of £3,161,050 was raised at 5 per cent., and £2,561,639 at 6 per cent., while £199,360 bore interest as high as 7 per cent.

A summary of all the transactions for the year 1895–96 is subjoined (pp. 252–254). The total revenue of the local bodies for the financial year was £1,330,818, and they further received a sum of £269,145 which could not properly be termed "revenue," making altogether a grand total of receipts amounting to £1,599,963. The rates formed 45 per cent. of the revenue proper. Licenses, rents, and other sources yielded 44 per cent., and 11 per cent. was granted by the General Government.

The expenditure of the local bodies amounted to £1,627,078. In the counties the cost of management, including salaries, travelling-expenses, rent, printing and advertising, collection of rates or tolls, legal expenses, and sundries, was £44,089 out of a total expenditure of £401,822. The Borough Councils expended in the same way £45,051 out of £549,164; and the Road Boards £16,402 out of £177,212. The percentages borne by the cost of management to the total receipts and total expenditure were,—

	Cost of Management per Cent. of Total Receipts.	Total Expenditure.
Counties	10·4	10·9
Boroughs	8·6	8·3
Road Boards	9·4	9·2

The financial operations of the County Councils for the year under review were much larger than those of the Road Boards, and the amount raised by rates more than double.

LOANS OF LOCAL BODIES, MARCH, 1896.—NET INDEBTEDNESS AND ANNUAL CHARGE.

	Amount of Debentures and Stock in Circulation.	Amount of Accrued Sinking Fund.	Net Indebtedness.	Annual Charge (excluding Exchange and Commission).		
				Interest.	Sinking Fund.	Total.
	£	£	£	£	£	£
Counties	10,510	388	10,122	671	80	751
Boroughs	2,777,495	289,566	2,487,929	153,646	11,168	164,814
Town Boards	1,184	31	1,153	71	10	81
Road Boards	6,700	229	6,471	378	76	454
River Boards	40,030	6,440	33,590	2,191	859	3,050
Water-supply Board	14,700	..	14,700	765	..	765
Harbour Boards	3,686,959	281,894	3,405,065	191,584	23,329	214,913
Drainage Board	200,000	21,267	178,733	12,000	2,000	14,000
Totals	6,737,578	599,815	6,137,763	361,306	37,522	398,828
Inscribed debt of local bodies under "The Government Loans to Local Bodies Act, 1886" (including inscribed stock exchanged for debentures under "The Roads and Bridges Construction Act, 1882")	667,451	..	667,451*	..	..	40,425
Outstanding debentures under "The Roads and Bridges Construction Act, 1882"	1,442	..	1,442	..	..	573†
Totals	7,406,471	599,815	6,806,656	..	..	439,826

* Repayable by twenty-six annual instalments of £40,425, representing 5 per cent. per annum on £808,491, the amount inscribed.
† Amount for 1895-96.

LOANS OF LOCAL BODIES RAISED WITHIN AND WITHOUT THE COLONY.

TABLE showing the Amount of Indebtedness of Counties, Boroughs, Town, Road, River, and Water-supply Boards, as on the 31st March, 1896, and of Harbour and Drainage Boards as on the 31st December, 1895, classified according to the Rates of Interest paid, distinguishing Loans raised in the Colony from those raised elsewhere. (See note.§)

Loans raised in the Colony.

Local Bodies.	3 %	4 %	4½ %	5 %	5½ %	5½ %	5¾ %	6 %	6½ %	6½ %	7 %	8 %	Total.
	£	£	£	£	£	£	£	£	£	£	£	£	£
Counties	..	..	..	2,000	..	..	..	2,500	..	..	6,010	..	10,510
Boroughs	..	..	500*	83,850	18,000	64,900	11,000†	281,370	..	2,600	128,000	100	615,320‡
Town Boards ..	..	..	..	..	..	..	..	1,184	..	..	..	..	1,184
Road Boards ..	..	..	..	2,400	..	..	..	4,300	..	..	..	..	6,700
River Boards	..	..	..	2,000	..	..	..	6,585	3,320	2,125	..	..	14,030
Water-supply Board ..	..	..	..	11,700	..	..	..	3,000	..	..	..	..	14,700
Harbour Boards ..	15,650	2,800	10,000	545,000	..	36,809	..	3,450	..	..	350	..	614,059
Total in colony ..	15,650	2,800	10,500*	646,950	18,000	101,709	11,000†	302,389	3,320	4,725	134,360	100	1,276,503‡

Loans raised outside the Colony.

Boroughs	..	..	272,725	801,700	..	..	..	1,022,750	..	..	65,000	..	2,162,175
River Boards ..	..	..	..	21,000	..	..	..	5,000	..	..	..	..	26,000
Harbour Boards ..	..	250,000	100,000	1,691,400	..	..	..	1,031,500	..	..	..	..	3,072,900
Drainage Board ..	..	..	..	..	..	..	..	200,000	..	..	..	..	200,000
Total outside colony	..	250,000	372,725	2,514,100	..	..	..	2,259,250	..	..	65,000	..	5,461,075

Total Loans.

Counties	..	..	..	2,000	..	..	..	2,500	..	..	6,010	..	10,510
Boroughs	..	..	273,225*	885,550	18,000	64,900	11,000†	1,304,120	..	2,600	193,000	100	2,777,495‡
Town Boards ..	..	..	..	..	..	..	..	1,184	..	..	..	..	1,184
Road Boards ..	..	..	..	2,400	..	..	..	4,300	..	..	..	..	6,700
River Boards ..	..	..	..	23,000	..	..	..	11,585	3,320	2,125	..	..	40,030
Water-supply Board ..	..	..	..	11,700	..	..	..	3,000	..	..	..	..	14,700
Harbour Boards ..	15,650	252,800	110,000	2,236,400	..	36,809	..	1,034,950	..	..	350	..	3,686,959
Drainage Board ..	..	..	..	..	..	..	..	200,000	..	..	..	..	200,000
Total loans ..	15,650	252,800	383,225*	3,161,050	18,000	101,709	11,000†	2,561,639	3,320	4,725	199,360	100	6,737,578‡

* £500 at £4 7s. 6d. per cent. † Including £2,000 at 5·7 per cent. ‡ Including also £25,000 on which no interest was paid.

§ Not including loans, amounting to £668,893, repayable by annual instalments under "The Roads and Bridges Construction Act 1882," and "The Government Loans to Local Bodies Act, 1886."

The details of amounts received, representing Government support to the various bodies, are stated in the following table :—

LOCAL GOVERNING BODIES.—RECEIPTS FROM GOVERNMENT, 1895-96.

—	Counties.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Inch-Clutha, also Road Board).	Land Drainage Boards.	Harbour Boards.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Rates on Crown and Native lands	31 0 9	62 14 4	17 3 5	36 10 9	...	...	...	147 9 3
One-third receipts from land sold on deferred payment and from perpetual leases	26,598 12 2	...	52 2 6	14,542 4 0	...	...	...	41,192 18 8
One-fourth of rents from small grazing-runs ...	2,890 4 3	...	...	498 6 11	...	...	...	3,388 11 2
Goldfields revenue and gold duty	27,456 6 4	1,215 1 10	79 19 2	372 8 0	...	...	...	29,123 15 4
Subsidies under the Local Bodies' Finance and Powers Act	35,537 13 11	11,126 15 6	712 14 9	16,195 19 7	...	...	...	63,573 3 9
Fees and fines under the Financial Arrangements Act	332 5 2	236 8 6	6 9 7	11 6 11	...	...	...	586 10 2
Other receipts	185 13 2	690 4 9	280 11 10	4,959 11 1	...	...	12,051 15 7	18,167 16 5
Total Revenue Account	93,031 15 9	13,331 4 11	1,149 1 3	36,616 7 3	...	...	12,051 15 7	156,180 4 9
Loans under Government Loans to Local Bodies Act	36,076 0 0	6,396 0 0	338 0 0	21,777 0 0	600 0 0	7,495 0 0	...	72,682 0 0
Grants for special works, &c.	43,507 7 2	4,013 3 10	...	50 0 0	...	...	...	47,570 11 0
Total receipts from Government...	172,615 2 11	23,740 8 9	1,487 1 3	58,443 7 3	600 0 0	7,495 0 0	12,051 15 7	276,432 15 9

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS.

—	Financial Year ended 31st March, 1896.							
	Counties.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Inch-Clutha, also Road Board).	Land-drainage Boards.	Waimakariri Water-supply Board.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Receipts:—								
Revenue from—								
Rates	186,117 7 0	253,645 18 9	3,802 16 10	89,762 11 2	7,379 13 9	266 5 8	290 1 3	541,264 14 5
Licenses, rents, and other sources	39,928 0 8	215,551 18 11	7,583 15 4	13,514 1 1	3,503 1 0	507 15 8	...	280,588 12 8
Government*	93,031 15 9	13,331 4 11	1,149 1 3	36,616 7 3	...	...	...	144,128 9 ½
County	...	...	...	7,023 5 0	...	...	...	7,023 5 0
Total revenue	319,077 3 5	482,529 2 7	12,535 13 5	146,916 4 6	10,882 14 9	774 1 4	290 1 3	973,005 1 3
Receipts not revenue ...	106,323 10 7	43,282 8 6	931 16 10	26,651 10 8	794 11 7	7,595 0 0	11,772 16 0	197,351 14 2
Total receipts	425,400 14 0	525,811 11 1	13,467 10 3	173,567 15 2	11,677 6 4	8,369 1 4	12,062 17 3	1,170,356 15 5
Expenditure:—								
Public works	269,169 3 7	200,169 13 4	8,744 6 1	123,050 3 1	4,405 1 9	5,893 7 6	4,449 10 1	615,881 5 5
Charitable aid and hospitals	34,068 13 3	27,363 0 10	297 13 6	9,225 19 6	...	...	...	70,955 7 1
Management	44,089 17 1	45,051 9 6	2,595 7 10	16,402 3 3	1,280 5 2	156 16 9	696 13 7	110,272 13 2
Other expenditure	54,494 10 1	267,580 13 2	1,886 17 2	28,534 3 9	5,709 18 4	687 18 7	474 8 0	359,368 9 1
Total expenditure ...	401,823 4 0	540,164 16 10	13,524 4 7	177,212 9 7	11,395 5 3	6,738 2 10	5,620 11 8	1,156,477 14 9
Liabilities (including loans) ...	625,095 10 9	3,019,624 15 10	5,325 1 4	329,490 12 1	57,434 3 10	12,327 7 9	14,087 16 0	4,063,385 7 7
Loans†	10,510 0 0	2,777,405 0 0	1,184 0 0	6,700 0 0	40,030 0 0	...	14,700 0 0	2,850,619 0 0†

* For amounts under various heads see preceding table; also for specification of loans under Government Loans to Local Bodies Act, and special grants, twhich are here included with "Receipts not revenue." † Excluding loans under Roads and Bridges Construction Act and Government Loans to Local Bodies Act. For rates of interest see page 251.

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS—*continued.*

—	Financial Year ended 31st December, 1895.		Totals—all Local Bodies.
	Harbour Boards (less New River, included in Boroughs).	Drainage Board.	
Receipts:—	£ s. d.	£ s. d.	£ s. d.
Revenue from—			
Rates	28,443 2 10	23,194 7 10	592,902 5 1
Licenses, rents, and other sources ...	293,564 17 0	559 5 8	574,712 15 4
Government	12,051 15 7	...	156,180 4 9
County	...	...	7,023 5 0
Total revenue	334,059 15 5	23,753 13 6	1,330,818 10 2
Receipts not revenue	71,793 8 5	...	269,145 2 7
Total receipts	405,853 3 10	23,753 13 6	1,599,963 12 9
Expenditure:—			
Public works	159,174 11 11	4,608 11 10	779,724 9 2
Charitable aid and hospitals... ...	...	...	70,955 7 1
Management	36,389 5 11	690 6 2	147,352 5 3
Other expenditure	255,463 8 9	14.215 0 0	629,046 17 10
Total expenditure	451,027 6 7	19,573 18 0	1,627,078 19 4
Liabilities (including loans)	3,770,020 15 11	209,481 3 1	8,042,887 6 7
Loans	3,686,959 0 0	200,000 0 0	6,737,578 0 0

NOTE.—The return of receipts and expenditure in this summary represents the net receipts and expenditure of the year, exclusive of credit and debit balances, bank overdrafts, deposits, amounts paid to sinking funds, and for redemption of debentures.

VALUE OF PROPERTY IN COUNTIES AND BOROUGHS, 31ST MARCH, 1896.

Local Bodies.	Rateable Property.	Unoccupied Crown and Native Lands.	Total.
	£	£	£
Boroughs	3,590,721	†	3,590,721
Boroughs (annual value, £2,146,405,* capitalised at 6 per cent.) ..	35,773,417	†	35,773,417
Counties—			
Road districts	38,176,700	1,583,412	39,760,112
Town districts	918,992	16,666	935,658
Town districts (annual value, £27,762,* capitalised at 6 per cent.)	462,700	†	462,700
Outlying	35,463,075 1,231,413‡	5,910,364	42,604,852
Totals	114,385,605 1,231,413‡	7,510,442	123,127,460

* By "The Rating Act, 1894," "the 'rateable value' of any property means the rent at which such property would let from year to year, deducting therefrom 20 per centum in case of houses, buildings, and other perishable property, and 10 per centum in case of land and other hereditaments, but shall in no case be less than 5 per centum on the value of the fee-simple thereof."

† Not returned.

‡ Aggregate value in Counties of Rotorua, East Taupo, West Taupo, Kawhia, and Sounds. In these counties there are no local bodies raising revenue, consequently the respective values of rateable and other property cannot be distinguished.

Here the total value of property in counties amounts to £83,763,322, and that in boroughs to £39,364,138.

The total value of real property in the colony, according to returns furnished by the local bodies, amounted, in March, 1896, to £123,127,460. This includes £114,385,605, value of rateable property, and £7,510,442 value of unoccupied Crown and Native lands which are not rateable. For five counties, however, where there are no local bodies raising revenue, the value of property is shown in the previous table in one amount, £1,231,413, without separating the unoccupied Crown and Native lands from those that are rateable.

Some of the boroughs and town districts rate on a capital value, but most of them upon an annual value of property. In the succeeding statement the capital value has, where necessary, been computed at 16·6 times the annual value.

In case of the boroughs, the Act under which the valuation is made provides for a reduction from the renting-value of 20 per cent. on houses and buildings, and 10 per cent. on land. The actual annual value of the properties will, therefore, be greater than the rating value by from 11 to 25 per cent.

By a general valuation of land (including tenements, buildings, and hereditaments), with all improvements, made under "The Land and Income Assessment Act, 1891," in November of that year, the following results were arrived at. The value of the improvements is shown distinct from that of the unimproved lands. All land is included, whether occupied or unoccupied, whether belonging to companies or private persons, local bodies, Natives, or the Crown.

VALUE OF PROPERTY: ASSESSMENT UNDER LAND AND INCOME ASSESSMENT ACT, NOVEMBER, 1891.

Counties and Boroughs.	Actual Value, including Improvements.	Value of Improvements.	Unimproved Value.
	£	£	£
Counties	85,818,167	27,922,735	57,880,233
Boroughs	36,406,862	18,442,562	17,907,662
Totals	122,225,029	46,365,297	75,787,895

Since 1891 the total value of property in boroughs has been increased by the constitution of new boroughs, and that of the counties correspondingly reduced. This will account for the increase in the town and the decrease in the county property shown in the local bodies' returns for March, 1896.

The figures for the North and Middle Islands, according to the above assessment, together with the results of the previous assessment made in 1888, are reproduced as being still interesting, and as affording a good index of the progress of the colony within the dates given:—

	1888.	1891.	Increase.
	£	£	£
North Island ..	49,607,873	57,441,115	7,833,242
Middle Island ..	61,529,841	64,783,914	3,254,073
Totals ..	111,137,714	122,225,029	11,087,315

The amount of rates levied by the various Borough Councils, Town Boards, Road Boards, and County Councils, and the value of the rateable property in each returned by these bodies, with other particulars, for the 31st March, 1896, were:—

BOROUGHS, 1895–96.

Name of Borough.	Census, 1896.		Number of		Amount of Rate levied in the Pound.					Estimated Annual (or renting) Value of Rateable Property in March, 1896.	Capital Value of Rateable Property, March, 1896.
	Population.	Dwellings.	Ratepayers.	Rateable Properties.	General.	Separate.	Special.	Water.	Library.		
					s. d.	s. d.	s. d.	s. d.	s. d.	£	£
Birkenhead ..	690	142	180	207	1 3	0 2½	0 3¾	..	..	5,300	..
Devonport ..	3,010	569	576	894	1 0	..	0 9	9⅜d., or 4 per cent.	..	19,712	..
Auckland ..	31,424	6,090	5,160	7,440	1 0	..	1 0	2½ per cent.(1)	0 0½	301,000	..
Newton ..	2,379	451	481	730	1 0	..	0 4	4 to 6 per cent.	..	16,092	..
Newmarket ..	1,929	352	262	314	1 2	..	0 7	4 to 6 per cent.	..	11,254	..
Parnell ..	4,196	810	529	750	1 0	..	0 9	4 per cent.	..	24,426	..
Onehunga ..	2,913	600	670	960	0 9	..	..	4 per cent.	..	14,644	..
Thames ..	4,261	850	779	1,517	1 0	..	..	0 6	0 1	23,187	..
Hamilton ..	1,248	243	392	624	1 0	..	..	..	..	7,243	..
Cambridge ..	865	190	250	688	1 1*	..	..	..	..	4,705	..
Tauranga ..	1,018	236	405	601	0 0	..	1 3	..	..	4,365	..
Gisborne ..	2,334	484	435	720	1 3	..	0 6	..	..	26,800	..
New Plymouth ..	3,825	742	700	755	1 3	..	1 1	6d. and 1s.	..	25,400	..
Hawera ..	1,770	338	360	600	1 3	..	..	..	..	11,374	..
Patea ..	739	153	209	540	1 3	..	0 4⅜	..	..	4,946	..
Wanganui ..	5,936	1,081	849	1,371	1 0	..	1 4	..	..	41,800	..
Marton ..	1,151	219	245	454	1 0	..	1 0	..	0 1	10,215	..
Feilding ..	2,045	406	400	809	1 3	..	1 0	..	0 1	15,105	..
Palmerston North ..	5,910	1,115	1,087	2,500	0 0⅞	..	1¾d. & 1/23d.	(2)	..	..	554,623
Foxton ..	1,102	206	224	448	1 3	..	..	..	0 1	7,062	..

Napier	..	9,231	1,730	901	2,514	0 6	(3)	1 7	(4)	..	81,458	..	
Hastings	..	3,190	638	695	1,029	1 0	..	1 0	..	..	34,800	..	
Dannevirke	..	1,415	281	312	833	1 3	..	..	..	..	9,271	..	
Woodville	..	1,060	216	453	462	1 3	..	..	..	..	10,030	..	
Pahiatua	..	1,158	244	374	443	1 3	..	0 $2\frac{1}{2}$	..	..	8,905	..	
Masterton	..	3,493	692	635	1,086	1 0	..	0 5	..	0 1	27,246	..	
Carterton	..	1,291	258	236	300	0 $0\frac{3}{4}$	..	..	..	..	..	86,773	
Greytown	..	1,129	231	221	356	1 0	..	..	..	0 1	7,883	..	
Lower Hutt	..	1,520	287	254	365	0 $0\frac{3}{4}$	..	..	..	..	..	245,036	
Petone	..	2,685	505	463	777	1 0	..	..	..	..	17,827	..	
Onslow	..	1,249	227	315	356	0 $0\frac{15}{16}$	..	..	..	..	..	152,425	
Wellington	..	37,441	6,747	4,150	8,569	1 3	0 3	6d. and 4d.	0 $10\frac{1}{5}$	0 1	362,483	..	
Karori	..	1,024	186	232	293	0 $0\frac{15}{16}$	..	..	..	..	..	115,022	
Melrose	..	2,044	377	..	..	0 $0\frac{15}{16}$	0 $0\frac{1}{5}$	..	..	..	..	218,753	
Picton	..	870	156	264	980	0 $0\frac{3}{4}$	0 $0\frac{1}{5}$	..	$\frac{7}{16}$d. and $\frac{7}{8}$d.	..	..	68,494	
Blenheim	..	3,018	555	484	1,434	1 $1\frac{1}{2}$	2d. and 6d.	0 $2\frac{1}{2}$	..	..	26,528	..	
Nelson	..	6,659	1,315	1,159	2,282	1 1	..	0 1	(5)	..	52,814	..	
Richmond	..	562	116	130	142	0 $0\frac{3}{4}$	..	..	4 per cent.	..	..	84,405	
Westport	..	2,424	509	760	1,084	1 0	0 8	..	..	..	19,894	..	
Greymouth	..	3,099	648	512	1,171	1 3	..	..	..	..	21,630	..	
Brunner	..	1,632	309	255	360	1 3	0 7	0 $0\frac{1}{2}$*	..	..	6,480	..	
Kumara	..	1,149	253	231	371	1 0	..	..	..	..	4,040	..	
Hokitika	..	2,059	493	550	900	1 0	0 6	..	..	..	13,130	..	
Ross ..	..	727	195	354	414	1 0†	(6) 0 $0\frac{3}{4}$	..	..	..	..	25,894	
Rangiora	..	1,869	349	349	554	0 $0\frac{3}{4}$	..	..	..	..	..	149,754	
Kaiapoi	..	1,828	352	335	597	1 0	..	..	..	..	9,528	..	
Christchurch	..	16,964	3,201	2 351	4,659	1 0	0 $2\frac{1}{2}$	0 $3\frac{1}{2}$	..	..	190,259	..	
Linwood ..	..	6,115	1,223	1,094	1,297	0 $0\frac{3}{4}$	(7)	..	..	..	..	419,803	
St. Albans	..	5,781	1,105	1,150	1,182	0 $0\frac{3}{4}$	$\frac{9}{64}$d. & $\frac{3}{16}$d.	..	..	..	..	503,166	
Sydenham	..	10,312	2,003	1,714	2,068	0 $0\frac{3}{4}$	$\frac{3}{4}$d. & $\frac{1}{64}$d.	(8) 0 $0\frac{1}{4}$	..	..	..	657,062	
Woolston ..	..	2,057	394	380	505	0 $0\frac{3}{4}$	..	..	..	..	..	176,286	
Sumner ..	..	588	105	237	397	0 10	..	0 7	(9)	..	6,866	..	
Lyttelton ..	..	3,898	743	528	750	0 9	..	..	..	..	22,045	..	
Akaroa ..	..	613	122	137	195	0 $0\frac{15}{16}$	..	..	..	..	..	43,386	
Ashburton	..	2,082	370	466	1,000	1 0	..	..	..	..	18,472	..	

NOTES 1 TO 10.—The general, separate, and water-rates referred to are specified at foot of page 259.

Boroughs, 1895-96—*continued.*

Name of Borough.	Census, 1896.		Number of		Amount of Rate Levied in the Pound.					Estimated Annual (or renting) Value of Rateable Property in March, 1896.	Capital Value of Rateable Property, March, 1896.
	Population.	Dwellings.	Ratepayers.	Rateable Properties.	General.	Separate.	Special.	Water.	Library.		
					s. d.	s. d.	s. d.	s. d.	s. d.	£	£
Timaru	3,613	691	580	1,048	0 6	..	1 0	6d. and 1s.	..	34,980	..
Waimate	1,286	271	324	500	1 0	..	..	..	..	6,892	..
Oamaru	5,225	1,010	1,085	1,526	1 3	..	1 6	(2)	..	30,347	..
Hampden	353	74	120	120	0 0¾	..	..	..	..	..	10,937
Palmerston South ..	775	159	248	360	0 0½	..	..	..	..	..	34,402
Hawksbury ..	760	143	220	440	0 0½	..	..	..	..	..	44,500
Port Chalmers ..	1,901	412	434	557	1 0	..	0 6	(10)	..	11,485	..
North-east Valley ..	3,374	647	1,075	1,141	1 0	..	0 6	..	..	17,671	..
Maori Hill ..	1,483	294	312	350	1s. & 1s. 3d.	..	..	..	..	10,636	..
West Harbour ..	1,366	270	475	629	1 0	..	1 0	..	..	9,291	..
Dunedin	22,815	4,471	2,688	4,244	1 0	..	0 3	(2)	..	232,814	..
Roslyn	4,118	756	861	961	1 0	0 1	..	..	..	27,411	..
Mornington ..	3,584	695	806	982	1 0	0 1½	..	..	..	21,422	..
Caversham ..	4,763	898	738	1,139	1 3	0 3	..	5 per cent.	..	29,099	..
St. Kilda	1,185	216	354	1,336	1 0	0 6	..	..	..	8,579	..
South Dunedin ..	4,592	906	843	1,251	1 3	0 3	0 6	(11)	..	19,998	..
Green Island ..	663	114	180	172	1 0	..	0 6	..	..	2,943	..
Mosgiel	1,382	283	325	411	1 0	..	..	..	..	7,888	..
Milton	1,139	231	213	303	1 0	..	..	..	..	5,972	..
Kaitangata ..	1,362	242	291	504	1 0	0 6	..	..	..	8,053	..
Balclutha	925	201	217	286	1 0	..	..	..	0 1	5,215	..
Lawrence	996	216	261	261	1 0	..	..	6d. in the pound	..	7,735	..
Roxburgh	433	99	70	128	1 0	..	..	..	..	1,526	..
Tapanui	408	89	120	139	1 3	..	..	..	..	2,298	..
Naseby	447	98	115	164	1 0	..	..	(12)	..	2,673	..

Cromwell	539	140	129	239	½ 3	0 2½	0 10	..	..	3,441	..
Alexandra ..	454	111	79	117	1 3	..	..	..	..	1,947	..
Arrowtown ..	409	87	87	298	½ 0	..	..	1 0	..	2,206	..
Queenstown ..	781	165	169	718	0 9	..	0 6	(13)	..	4,971	..
Gore	2,032	402	578	1,391	½ 0	..	..	..	..	14,006	..
Mataura	789	147	176	468	0 6	..	..	..	..	5,091	..
Winton	397	80	111	154	½ 3	..	..	..	..	2,283	..
Invercargill ..	5,632	1,015	900	1,700	1 0	..	1 0	(2)	..	51,953	..
North Invercargill ..	877	176	241	319	1 0	..	1 8	..	..	3,899	..
South Invercargill ..	1,886	354	594	897	1 3	..	1 11	..	..	5,884	..
East Invercargill ..	935	175	211	214	1 0	..	1 0	..	..	3,903	..
Avenal	327	68	66	97	1 0	..	..	..	..	1,774	..
Gladstone	339	67	132	132	1 0	..	0 6	..	..	2,449	..
Campbelltown ..	1,075	238	287	494	1 3	..	..	..	..	7,318	..
Riverton	893	202	221	430	1 3	..	..	..	..	4,133	..
Totals ..	..	..	..	..	..	..	..	..	..	2,146,405	3,590,721

* On capital value.
† On annual value.
(1) To consumers only.
(2) Maximum under "Municipal Corporations Act, 1886."
(3) 6d., 3d., and 1d., according to district.
(4) 2½ to 1 per cent., according to value; or 1s. 3d. per 1,000 gallons per meter.
(5) 3½ per cent. on dwellings, 2 per cent. on stores, &c.
(6) On mining property.
(7) ½d., $\frac{3}{10}$d., ¼d., and $\frac{5}{12}$d.
(8) Not collected.
(9) £1 per house per annum, and by meter.
(10) In terms of section 325, "Municipal Corporations Act, 1886."
(11) Maximum, 6 per cent.
(12) 2½, 3½, 6, and 7 per cent. on rateable value, and 5s. and 10s. per annum.
(13) 6d. in the pound on properties where water is laid on, and 3d. in the pound where not.

Town Districts, 1895–96.

Town Districts.	Population, Census, April, 1896.	Number of			Amount of Rate levied in the Pound.		Capital Value of			Annual Value of Rateable Property.
		Dwellings.	Ratepayers.	Rateable Properties.			Rateable Property.	Unoccupied Crown and Native Lands.	All Property.*	
					s.	d.	£	£	£	£
Kamo..	22	52	80	95	0	0¾	15,085	1,350	16,435	..
Whangarei	744	148	164	252	0	0¾	60,855	1,400	62,255	..
Helensville	564	101	101	135	0	3	..	..	..	2,751
Papakura	274	69	154	201	0	0¼	18,550	400	18,950	..
Te Aroha	672	126	243	249	0	6	..	..	..	3,347
Te Awamutu	347	60	85	85	0	0½	20,602	..	20,602	..
Kihikihi	202	55	115	158	0	1½	9,270	400	9,670	..
Ngaruawahia	235	53	..	..	0	0¾	13,150	200	13,350	..
Rotorua†	499	86	..	..	..	..	..	..	..	..
Opotiki	641	124	180	281	0	0½	29,565	..	29,565	..
Waitara (Raleigh) ..	517	113	197	280	0	0¾	27,500	3,200	30,700	..
Opunake	400	86	160	539	0	0½	24,356	2,866	27,222	..
Inglewood	658	134	158	400	0	0¾	27,800	..	27,800	..
Stratford	1,256	255	308	1,039	0	0¾	57,255	5,170	62,425	..
Normanby	396	76	133	133	0	1½	13,134	..	13,134	..
Manaia	471	98	120	200	0	0½	28,195	..	28,195	..
Waverley	442	87	90	90	0	0½	20,801	..	20,801	..
Lethbridge (Turakina) ..	251	50	48	65	0	8	..	..	..	1,581
Bull's	521	110	120	175	1	0	..	..	..	3,620
Halcombe	376	98	160	730	1	0	..	..	..	1,755
Clyde (Wairoa) ..	579	117	170	308	0	0¾	46,254	1,680	47,934	..
Taradale	807	148	136	188	0	0¼	75,052	..	75,052	..
Ormondville	453	86	156	215	0	6	..	..	..	2,525
Waipawa	764	146	133	178	0	6	..	..	..	6,330
Kaikora North	301	62	102	122	0	6	..	..	..	2,406
Featherston	711	145	150	190	0	0¾	46,005	..	46,005	..
Johnsonville	493	82	89	109	0	0¼	45,871	..	45,871	..
Havelock	365	75	95	..	0	1	17,242	..	17,242	..
Amberley	437	93	90	130	0	0¾	27,525	..	27,525	..
Southbridge	494	43	230	245	0	0¾	33,520	..	33,520	..
Hampstead	1,214	223	278	292	0	0½	54,451	..	54,451	..
Tinwald	538	89	125	189	0	0⅝	46,691	..	46,691	..
Geraldine	841	159	190	210	0	0¾	39,314	..	39,414	..
Temuka	660	128	147	300	0	1¼	48,669	..	48,669	..
Arowhenua	789	165	228	421	0	0¾	23,087	..	23,087	..
Allanton (Greytown) ..	274	51	86	91	0	0½	7,052	..	7,052	..
Outram	452	82	68	115	0	0½	28,704	..	28,704	..
Clinton	474	95	121	132	1	0	..	..	..	1,360
Wyndham	483	105	98	354	1	0	..	..	..	2,087
Otautau	367	76	105	105	0	0¾	13,438	..	13,438	..
Totals	..	..	..	..		..	918,993	16,666	935,659	27,762

* Exclusive of property owned by Town Boards. † Special town district under "The Thermal-Springs Districts Act, 1881."

Road Districts, 1895–96.

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rate levied in the Pound.
					£	£	£	d.
Mongonui—								
Oruaiti (1893) ..	91	19	..	..	13,534	3,646	17,180	..
Oruru (1895) ..	534	108	..	..	27,471	13,640	41,111	½
Whangaroa, Bay of Islands, Hokianga, Hobson — No road districts.								
Whangarei—								
Hikurangi ..	354	74	73	104	21,838	2,053	23,891	
Kaurihohore ..	212	37	46	55	16,846	137	16,983	
Kensington ..	324	69	95	106	27,135	3	27,138	
Maungakaramea ..	227	47	102	102	21,676	1,356	23,032	
Maunu	557	128	140	140	46,543	14,437	60,980	
Otonga	207	41	55	57	13,301	1,846	15,147	
Otonga East ..	246	48	81	101	13,800	7,263	21,063	
Parua Bay ..	299	62	200	250	20,018	3,597	23,615	
Ruarangi ..	117	73	72	117	7,473	1,171	8,644	
Waikiekie ..	180	40	196	265	17,068	3,698	20,766	
Waipu North ..	209	50	72	72	17,879	7,159	25,038	
Whareora ..	101	23	78	78	6,736	600	7,336	
Otamatea—								
Mangawai ..	272	76	75	80	20,499	4,085	24,584	
Matakohe ..	328	66	168	168	22,448	3,962	26,410	
Whakapirau (merged) ..	255	47	..	..	..	..	..	..
Rodney—								
Ahuroa	36	8	48	51	4,683	217	4,900	
Albertland North ..	61	12	47	47	7,116	616	7,732	
Albertland South ..	347	76	174	231	26,364	740	27,104	
Komokoriki ..	79	19	42	..	6,585	2,255	8,840	
Mahurangi East ..	135	38	73	73	10,311	544	10,855	
Mahurangi Upper ..	833	162	277	359	62,225	3,485	65,710	
Mainene ..	54	10	36	76	6,998	793	7,791	
Matakana East ..	109	23	23	22	7,966	490	8,456	
Matakana West ..	194	41	67	130	13,907	838	14,745	..
Omaha ..	337	68	152	185	21,830	11,264	33,094	
Puhoi	465	74	157	294	32,387	1,493	33,880	
Tauhoa	409	104	94	..	21,230	1,587	22,817	
Wharehine ..	101	21	43	51	16,191	274	16,465	..
Waitemata—								
Kaukapakapa ..	577	159	164	239	43,188	3,847	47,035	
Pukeatua ..	650	236	228	272	26,272	..	26,272	
Whangaparaoa ..	107	24	35	41	7,403	86	7,489	

Road Districts, 1895–96—*continued.*

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rate levied in the Pound.
Eden—					£	£	£	d.
Arch Hill ..	1,557	336	285	566	92,583	..	92,583	1s.*
Avondale (1894–95)	901	193	340	395	86,000	500	86,500	¾
Eden Terrace ..	1,604	333	304	438	85,736	..	85,736	¾†
Epsom	660	119	116	116	139,910	..	139,910	½
Mount Albert ..	1,668	316	388	437	147,564	..	147,564	¾†
Mount Eden ..	3,677	727	720	830	303,151	..	303,151	¾
Mount Roskill ..	495	80	141	166	116,305	2,016	118,321	¾
Mount Wellington	876	149	189	576	135,787	1,485	137,272	¾
One-tree Hill ..	975	147	167	492	167,648	..	167,648	½
Panmure Township	323	62	93	132	13,598	..	13,598	½
Point Chevalier ..	591	33	37	44	30,142	79,950	110,092	½
Remuera.. ..	2,034	376	438	455	329,097	21,425	350,522	¾
Tamaki West ..	382	56	76	108	88,555	..	88,555	½
Manukau—								
Awhitu	372	99	129	145	27,026	705	27,731	¾
Howick Town ..	220	49	90	95	10,963	100	11,063	¾
Hunua	230	43	144	180	20,520	..	20,520	¾
Karaka	189	37	64	160	20,150	1,800	21,950	¾
Mangare	854	164	180	220	169,575	8,180	177,755	¾
Manurewa ..	213	47	81	114	28,466	..	28,466	¾
Maraetai.. ..	96	20	22	33	9,286	900	10,186	¾
Mauku	423	95	162	178	48,394	2,146	50,540	¾†
Maungatawhiri ..	293	45	74	103	28,220	171	28,391	..
Mercer	215	42	72	80	10,989	4,858	15,847	..
Opaheke	462	89	117	168	39,765	1,695	41,460	¾
Opaheke North ..	367	81	162	211	32,829	185	33,014	¾
Otahuhu ..	942	192	225	293	59,958	1,412	61,370	¾
Pakuranga ..	346	63	70	94	48,270	..	48,270	¾
Papakura ..	393	71	97	102	41,670	..	41,670	¾
Paparata ..	407	82	116	163	37,240	998	38,238	¾
Paparoa	107	26	60	64	10,630	..	10,630	¾
Papatoitoi ..	176	30	36	51	51,349	50	51,399	¾
Pokeno	405	76	90	92	31,518	2,694	34,212	¾
Pollok Settlement..	133	27	41	41	10,693	262	10,955	¾
Pukekohe East ..	884	164	250	250	87,246	..	87,246	¾
Pukekohe West ..	1,104	202	212	212	116,201	..	116,201	¾
Tamaki East ..	668	123	125	160	93,790	150	93,940	¾
Turanga	209	41	62	62	21,536	130	21,666	¾
Waipipi	827	197	235	400	81,336	..	81,336	¾
Wairoa	859	182	180	220	80,960	..	80,960	¾
Waiuku	454	93	164	225	61,278	..	61,278	¾
Coromandel, Thames, Ohinemuri	No road districts.							

* On annual value. † General. Water rate and special rate also levied.

Road Districts, 1895–96—*continued.*

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rate levied in the Pound.
					£	£	£	d.
Piako—								
Matamata ..	231	45	26	45	79,569	9,685	89,254	½
Taotaoroa ..	70	14	18	26	40,003	5	40,008	½
Waitoa	979	207	197	270	237,268	19,940	257,208	½
Waikato—								
Cambridge ..	538	100	96	112	111,312	1,481	112,793	½
Huntly	844	156	196	224	65,945	..	65,945	½
Kirikiriroa ..	823	157	259	259	236,422	8,392	244,814	½
Tamahere ..	202	34	34	34	59,412	5,431	64,843	½
Whangamarino ..	407	73	206	419	64,995	..	64,995	..
Waipa—								
Hamilton (merged)	396	67	..	..	..	..	..	..
Mangapiko (merged)	482	87	..	..	..	..	..	..
Newcastle ..	393	85	140	150	56,752	4,060	60,812	½
Pukekura ..	802	162	370	450	122,820	1,033	123,853	..
Rangiaohia ..	549	90	127	127	101,377	..	101,377	½
Tuhikaramea ..	89	21	50	50	19,404	..	19,404	½
Raglan—								
Karamu (no Board).	74	15	..	..	*	..	..	..
Onewhero ..	170	40	55	60	12,500	..	12,500	†
Pirongia	160	34	82	112	17,483	1,076	18,559	½
Te Akau (no Board).	51	8	..	..	*	..	..	..
Whaingaroa. ..	152	34	62	62	21,503	..	21,503	½
Kawhia .. West Taupo East Taupo Rotorua ..	No road districts.							
Tauranga—								
Katikati	397	92	185	211	25,000	..	25,000	½
Te Puke	397	78	103	168	44,361	22,687	67,048	½
Te Puna	165	31	135	140	23,354	25,188	48,542	..
Whakatane—								
Opotiki	584	115	211	249	105,705	28,176	133,881	½
Whakatane ..	467	104	159	195	74,248	5,007	79,255	½d (a) ½d (b)
Waiapu (no road districts).								
Cook—								
Arai	285	56	30	134	164,458	79,922	244,380	⅛
Kaiti	565	111	152	450	58,920	2,100	61,020	½d (a) ½d (b)

(a) General. (b) Special.

* Included in "Outlying" (see Counties Table, page 270). † No rate struck in 1896.

ROAD DISTRICTS, 1895-96—*continued.*

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rate levied in the Pound.
Cook—*continued.*					£	£	£	d.
Ngatapa	434	91	50	66	223,381	52,760	276,141	*
Ormond	461	81	83	112	71,041	625	71,666	½
Patutahi ..	582	101	127	266	195,992	8,718	204,710	¼
Pouawa	55	12	70	105	90,000	2,387	92,387	†
Poverty Bay ..	1,087	194	173	200	190,918	24,533	215,451	..
Waikohu ..	139	25	30	83	316,121	..	316,121	*
Waimata ..	259	47	47	50	130,459	12,756	143,215	½
Whataupoko ..	936	199	230	270	75,600	10,122	85,722	⅜d (a) ⅛d (b)
Clifton (no road districts).								
Taranaki—								
Barrett	372	60	78	87	33,053	706	33,759	½
Carrington ..	232	45	58	86	29,983	..	29,983	¾
Egmont ..	667	115	127	309	66,377	8,912	75,289	½
Elliot	215	39	47	48	15,155	369	15,524	¾
Frankley ..	278	65	59	59	25,043	..	25,043	¾
Henui	391	72	76	91	26,721	..	26,721	¾
Mangorei ..	246	45	61	61	30,010	20	30,030	¾
Moa	2,451	459	480	500	225,642	..	225,642	¾ ‡
Oakura	320	47	145	175	33,381	8,732	42,113	½
Okato	306	54	70	88	43,736	5,650	49,386	½
Omata	291	49	47	48	32,850	..	32,850	½
Parihaka ..	1,187	249	279	394	168,948	88,476	257,424	½
Tataraimaka ..	126	33	32	35	25,202	..	25,202	½
Upper Hurford ..	69	14	16	17	7,785	..	7,785	½
Waitara West ..	851	155	178	193	92,226	10,653	102,879	..
Waiwakaiho ..	393	69	111	176	35,868	..	35,868	¾ ‡
Stratford—								
Manganui ..	1,478	289	364	899	145,692	..	145,692	¾ ‡
Ngaire (merged) ..	794	140	..	..	..	..	..	..
Hawera—								
Waimate ..	2,229	450	459	580	451,376	33,178	484,554	¾ ‡
Patea—								
Kohi	195	29	30	30	50,139	200	50,339	½
Motoroa ..	37	10	19	19	24,071	1,427	25,498	¾
Okotuku ..	144	29	23	23	49,455	..	49,455	¼
Patea East ..	384	67	80	144	112,083	12,507	124,590	*
Patea West ..	799	149	194	460	184,874	5,186	190,060	§
Wairoa	98	21	29	29	49,943	8,937	58,880	¾
Waitotara - Momohaki	492	104	119	357	109,869	9,895	119,764	¾ ‡
Whenuakura - Waitotara	334	59	42	42	128,308	..	128,308	½

(a) General. (b) Special.

* No rate struck † No general rate; 2d., 1d., and ½d. special rates. ‡ General; special rate also levied, but amount not returned. § No general rate struck.

ROAD DISTRICTS, 1895-96.—*continued.*

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rate levied in the pound.
Waitotara (no road dist'cts).					£	£	£	d.
Wanganui—								
Kaitoke ..	537	96	..	..	107,973	5,690	113,663	½
Kaukatea ..	161	33	50	60	72,690	..	72,690	½
Mangawhero ..	715	188	200	276	213,503	282,243	495,746	½
Purua	839	154	160	192	148,211	1,376	149,587	..
Upper Wangaehu	450	115	86	132	137,303	60,135	197,438	½*
Rangitikei (no road dist'cts).								
Oroua—								
Fitzherbert ..	564	127	302	334	296,820	11,284	308,104	¾*
Manawatu ..	2,163	418	515	603	552,874	26,538	579,412	½*
Manchester ..	3,347	632	652	1,804	878,592	20,782	899,374	½*
Pohangina, Kiwitea, Manawatu — No road districts.								
Horowhenua—								
Otaki	1,198	240	304	755	198,233	5,808	204,041	¾*
Te Horo ..	405	110	137	290	175,718	7,731	183,449	½*
Wirokino ..	2,189	502	624	1,021	657,303	17,595	674,898	¾*
Wairoa, Hawke's Bay — No road dist'cts.								
Waipawa—								
Kumeroa ..	404	97	120	238	118,259	3,000	121,259	½*
Maharahara ..	344	75	83	111	64,355	3,693	68,048	½*
Maungaatua ..	249	55	55	..	71,174	625	71,799	½
Norsewood ..	1,043	223	236	250	111,324	17,659	128,983	½
Ruataniwha North	581	125	60	90	25,822	2,250	28,072	½
Takapau ..	523	106	55	75	193,395	..	193,395	½
Waipawa ..	327	62	73	85	60,665	..	60,665	½
Waipukurau ..	816	164	102	126	296,814	1,496	298,310	½
Woodville ..	1,001	182	230	331	118,441	..	118,441	½
Patangata—								
Oero	198	34	13	13	270,850	..	270,850	½
Patangata ..	339	63	54	99	134,986	..	134,986	½
Porangahau ..	474	84	70	112	266,511	15,373	281,884	½
Taumumu ..	228	48	23	23	457,360	30	457,390	⅛
Wallingford ..	244	36	22	33	300,289	..	300,289	½
Wanstead ..	121	19	54	72	110,147	10	110,157	†
Weber	469	107	131	157	121,793	..	121,793	¾

* General; special rate also levied, but amount not returned. † No rate struck.

ROAD DISTRICTS, 1895-96—*continued.*

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rate levied in the Pound.
Pahiatua (no road districts).					£	£	£	d.
Wairarapa North—								
Akiteo	453	114	39	43	239,644	..	239,644	½
Castlepoint ..	657	142	84	109	294,443	..	294,443	½*
Eketahuna ..	2,159	501	458	1,030	231,974	11,326	243,300	$\frac{3}{16}$*
Masterton ..	2,062	390	350	438	610,964	42,110	653,074	$\frac{3}{16}$pt.† $\frac{5}{16}$pt.
Mauriceville ..	1,086	231	263	302	94,283	13,575	107,858	½*
Upper Taueru ..	211	47	55	51	99,923	561	100,484	⅜*
Wairarapa South—								
Featherston ..	2,204	418	440	600	1,081,444	36,990	1,118,434	⅜*
Taratahi-Carterton	2,494	475	648	852	702,576	..	702,576	½*
Hutt—								
Makara	278	59	57	145	82,498	..	82,498	¼*
Seatoun	175	19	28	53	26,475	..	26,475	½
Sounds (no road districts).								
Marlborough—								
Awatere	432	81	41	64	533,397	1,700	535,097	⅜
Omaka	1,617	274	395	410	279,388	300	279,688	⅜
Pelorus	1,407	316	210	290	129,519	111,800	241,319	½*
Picton	866	159	160	250	124,069	17,025	141,094	½
Spring Creek ..	769	144	135	139	150,938	..	150,938	½
Wairau	874	187	120	173	382,762	6,270	389,032	..
Kaikoura (no road districts).								
Collingwood—								
Collingwood ..	1,019	279	280	912	81,833	40,100	121,933	½
Takaka	1,405	284	293	690	121,077	..	121,077	½
Waimea—								
Dovedale ..	327	44	60	60	29,393	1,360	30,753	..
Motueka ..	976	174	165	125	83,768	..	83,768	..
Moutere Upper ..	409	81	90	96	35,764	..	35,764	..
Riwaka	624	116	128	190	74,104	..	74,104	..
Stoke	1,244	195	115	250	227,490	6,600	234,090	¼
Suburban North ..	593	130	119	140	96,253	..	96,253	..
Waimea West ..	422	77	71	71	74,200	..	74,200	..
Buller, Inangahua, Grey, Westland, Amuri, Cheviot — No road districts.								

* General; special rate struck, but amount not returned. † Subdivisions Nos. 1 and 3, ¾d.; subdivision No. 2, 5-16d.

ROAD DISTRICTS, 1895–96—*continued.*

County and District.	Census, 1896. Population.	Census, 1896. Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Total Value of Rateable Property.	Total Value of Unoccupied Crown and Native Lands.	Total Value of Property in District.	Amount of Rates levied in the Pound.
Ashley—					£	£	£	d
Ashley	686	144	210	220	290,070	12,315	302,385	½
Cust	771	151	135	155	123,999	..	123,999	½
Eyreton	1,727	316	264	264	378,293	..	378,293	½
Eyreton West ..	397	80	80	80	160,868	..	160,868	½
Kowai	1,967	390	475	680	489,953	1,227	491,180	½
Mandeville and Rangiora	2,488	447	426	642	576,670	6,332	583,002	½
Oxford	2,213	458	457	628	330,572	2,761	333,333	½ *
Waipara	1,227	232	260	370	1,147,057	17,600	1,164,657	½
Selwyn—								
Avon	4,532	876	1,250	1,615	561,150	..	561,150	1s. †
Courtenay ..	2,491	422	433	602	722,219	..	722,219	½
Ellesmere ..	3,841	768	527	567	1,023,835	..	1,023,835	½
Halswell	1,179	190	180	210	288,167	..	288,167	½
Heathcote ..	2,369	427	502	625	371,005	..	371,005	½ *
Lake Coleridge ..	141	24	37	51	211,264	..	211,264	..
Lincoln	1,322	245	220	286	298,574	..	298,574	½
Malvern	707	129	153	249	123,287	..	123,287	½
Malvern East ..	628	130	167	246	114,123	..	114,123	½
Malvern South ..	483	91	222	303	83,986	..	83,986	½
Rakaia	889	176	190	288	319,630	..	319,630	½
Riccarton ..	5,206	857	892	1,090	746,496	..	746,496	½
Spreydon ..	1,278	233	317	312	129,900	..	129,900	½
Springs	1,984	375	390	508	483,707	..	483,707	½
Taitapu	376	69	60	60	95,834	..	95,834	½
Templeton ..	2,048	331	350	420	367,785	..	367,785	½
Upper Waimakariri	122	22	16	16	74,017	..	74,017	1
Akaroa—								
Akaroa and Wainui	1,416	263	242	314	304,392	..	304,392	½
Le Bon's Bay ..	271	60	80	80	65,822	..	65,822	½ §
Little River ..	820	161	160	283	345,215	..	345,215	½
Okain's Bay ..	567	117	116	120	92,952	..	92,952	½ §
Pigeon Bay ..	352	61	51	65	108,917	96	109,013	½
Port Levy ..	132	28	40	45	104,649	2,346	106,995	½
Port Victoria ..	328	57	64	80	64,838	3,924	68,762	..
Ashburton—								
Anama	69	13	17	20	39,602	..	39,602	½
Ashburton Upper ..	1,811	320	450	550	574,385	..	574,385	¼ to ½ ‡
Coldstream ..	365	72	76	87	193,534	..	193,534	½
Longbeach ..	1,400	251	222	319	432,843	..	432,843	11/32 to ½
Mount Hutt ..	1,157	241	188	246	680,158	1,500	681,658	½
Mount Somers ..	918	173	250	..	189,179	..	189,179	½

* General; separate rate also levied, but amount not returned. † On annual value.
‡ Wards—Nos. 1 and 3, ¾d. in the pound; Nos. 2 and 4, ½d. in the pound; No. 6, ¼d. in the pound; No. 5, ¾d. in the pound. § General; special rate also levied; amount not stated.

Road Districts, 1895–96—*continued.*

County and District.	Census, 1896.		Number of		Total Value of			Amount of Rates levied in the Pound.
	Population.	Dwellings.	Ratepayers.	Rateable Properties.	Rateable Property.	Unoccupied Crown and Native Lands.	Property in District.	
					£	£	£	d.
Ashburton—*continued.*								
Rangitata ..	703	156	207	237	361,665	..	361,665	1¼
South Rakaia ..	1,558	326	336	420	487,680	..	487,680	1¼
Wakanui ..	1,087	179	224	224	350,358	5,874	356,232	..
Levels (no road dis'cts.)								
Geraldine—								
Geraldine ..	2,424	427	475	555	463,566	..	463,566	..
Mount Peel ..	517	102	92	113	409,262	142	409,404	..
Temuka	2,268	390	482	623	644,035	1,960	645,995	1/16
Mackenzie, Waimate, Waitaki, Waihemo, Waikouaiti — No road districts.								
Peninsula—								
Otago Heads ..	306	60	..	..	33,502	..	33,502	..
Peninsula ..	1,294	238	328	379	187,453	..	187,453	¾
Portobello ..	877	174	360	360	141,697	..	141, 97	¾
Tomahawk ..	168	28	33	33	29,685	..	29,685	¾
Taieri—								
Half-way Bush (no Board) ..	120	24	..	..	..	..	..	..
Bruce—								
Balmoral ..	370	77	68	74	223,201	750	223,951	..
Inch-Clutha (Road and River) ..	420	85	64	74	66,361	..	66,361	½
Mount Stuart ..	708	140	115	130	108,930	2,230	111,160	½
Clutha, Tuapeka, Maniototo, Vincent, Lake — No road districts.								
Southland—								
Invercargill (no B'd.)	1,382	268	..	..	..	..	..	..
Knapdale ..	1,391	289	230	274	246,484	..	246,484	½
Lindhurst (no Board)	1,150	221	..	..	..	..	..	..
Otaraia	656	126	169	269	125,748	..	125,748	¾
Oteramika ..	1,894	367	355	..	269,702	..	269,702	¾
Tuturau	732	127	..	..	140,092	..	140,092	¾
Waimumu ..	574	117	127	191	171,591	..	171,591	¾
Wyndham ..	316	70	50	68	78,789	1,394	80,183	¾
Wallace, Fiord, Stewart Island — No road distr's.								
Totals ..	..	..	..	..	38,176,700	1,583,412	39,760,112	..

COUNTIES, 1895–96.

Counties.	Area in Square Miles.	Population, Census, April, 1896.	Value of Real Property in County (including Town Districts, Road Districts, and Outlying).			Rates struck by County.	
			Rateable Property.	Unoccupied Crown and Native Lands.	Total Property.	General.	Other.
			£	£	£		
Mongonui ..	934	1,889	133,949	58,727	192,676	¾d.*	
Whangaroa ..	160	969	36,461	27,402	63,863	1¼d.	
Hokianga ..	972	1,909	181,283	275,870	457,153	1d.	¼d. separate,* H. and C.A.
Bay of Islands..	826	2,723	175,532	180,289	355,821	1d.	
Hobson ..	688	3,750	268,914	54,490	323,404	1½d.	6d. per acre separate in Totarariki Drainage District.
Whangarei ..	928	6,847	786,386	106,860	893,246	¾d.†	¾d. separate.*
Otamatea ..	364	2,483	230,477	42,178	272,655	¾d.†	¾d. on part, ½d. on part, separate.*
Rodney ..	566	3,464	271,232	28,798	300,030	¾d.†	¾d. separate in Hoteo Riding.
Waitemata ..	613	6,762	604,618	32,802	637,420	¾d.	¾d. separate in Wairini, Northcote, Birkenhead, Kaukapakapa, Mairetahi, and Waikomiti Ridings; and ½d. separate in Takapuna and Waitakerei Ridings.
Eden.. ..	43	15,940	1,736,076	105,376	1,841,452	..	
Manukau ..	791	12,185	1,298,408	26,836	1,325,244	..	
Coromandel ..	403	4,987	133,300	91,780	225,080	1½d.	¾d. Native rate on property, value £26,807.
Thames ..	494	4,515	178,493	69,191	247,684	1½d.	¾d. separate, H. and C.A.
Ohinemuri ..	478	4,761	97,290	..	97,290	¾d.	
Piako ..	1,095	2,706	652,272	59,463	711,735	½d.†	½d. separate, Te Aroha Riding; ½d. special, Te Aroha Riding, and $\frac{1}{10}$d. special, Patetere Riding.
Waikato ..	591	2,814	538,086	15,304	553,390	½d.	½d. in Mangapiko and Hamilton, and ¾d. in Alexandra outlying districts.
Waipa ..	282	3,584	469,572	5,693	475,265	¾d.†	

* On outlying. † On whole county.

COUNTIES, 1895-96—*continued*

Counties.	Area in Square Miles.	Population, Census April, 1896.	Value of Real Property in County (including Town Districts, Road Districts, and Outlying).			Rates struck by County.	
			Rateable Property.	Unoccupied Crown and Native Lands.	Total Property.	General.	Other.
			£	£	£	£	
Raglan ..	824	1,545	246,024	111,076	357,100	¾d. and ½d.	$\frac{1}{10}$d. separate, H. and C.A.; ¼d. special, Karioi loan.
Kawhia ..	1,515	598	354,269		354,269	..	
West Taupo ..	1,594	156	235,997		235,997	..	
East Taupo ..	2,581	232	301,681		301,681	..	
Rotorua ..	984	840	168,371		168,371	..	
Tauranga ..	577	1,622	208,241	89,596	297,837	¾d.	$\frac{1}{10}$d. separate, H. and C.A.; ¼d. and ⅛d. special, Waimapu; ⅛d. special, Maketu Riding; and $\frac{1}{11}$d. special, Katikati Riding.
Whakatane ..	3,156	1,988	277,433	407,096	684,529	¾d.	¾d. special.
Waiapu ..	1,121	447	303,201	153,129	456,330	¾d.	Various special, from ⅛d. to ¾d.
Cook	1,950	5,287	1,823,299	292,174	2,115,473	¾d.*	
Clifton ..	1,446	1,450	226,574	293,044	519,618	1d.	
Taranaki ..	583	9,970	971,636	129,584	1,101,220	¾d.	⅛d. separate, H. and C.A.
Stratford ..	768	5,141	608,892	5,170	614,062	¾d. and ½d.†	½d. separate, West Riding; and ¾d. separate, South and East Ridings.
Hawera ..	438	6,984	1,176,001	75,552	1,251,553	¾d. and ½d.‡	½d. separate, in outlying districts.
Patea.. ..	691	3,084	786,932	98,081	885,013	¾d.	¾d. separate, Kapara Riding; 1½d. special, Kapara Loan.
Waitotara ..	343	2,737	653,597	70,292	723,889	⅞d.*	$\frac{5}{16}$d., 1⅜d., and 2¾d. special, on special rating districts.
Wanganui ..	1,942	3,095	742,508	349,444	1,091,952	¾d.	¼d. separate.
Rangitikei ..	852	6,030	1,526,986	131,299	1,658,285	¾d §	⅛d. separate, Paraekaretu Riding; various special; average ½d. over whole county.
Kiwitea ..	336	2,428	628,324	..	628,324	¾d.	
Oroua ..	394	6,450	1,757,536	58,604	1,816,140	..	
Pohangina ..	295	1,351	294,175	..	294,175	1½d.	1⅝d. special on part.

Manawatu ..	267	2,709	783,398	4,680	788,078	½d.	Separate, ½d. Mt. Stewart; ⅜d. Waitohi, Campbell, Carnarvon, and Kawakawa; and ½d. Sandon and Awahou Ridings.
Horowhenua ..	591	3,792	1,915,344	31,134	1,946,478	⅝d. and ¾d.	Various special, from $\frac{3}{32}$d. to ½d.
Wairoa ..	1,887	1,490	741,894	179,223	921,117	⅜d.	Special, $\frac{1}{16}$d. on whole county, and $\frac{5}{16}$d. and $\frac{5}{32}$d. on parts.
Hawke's Bay ..	3,232	6,894	3,433,460	318,969	3,752,429	⅜d.	
Waipawa ..	1,154	8,866	1,914,160	113,371	2,027,531	¼d.*	Separate, ⅜d. in Makaretu, Ormondville, and Dannevirke, merged districts; special, ·113d., ·756d., and $\frac{3}{10}$d. on whole county.
Patangata ..	747	2,374	1,702,036	15,413	1,717,449	⅜d.	¼d. Harbour Board levy.
Pahiatua ..	302	3,208	552,677	..	552,677	1½d.	Various.
Wairarapa N. ..	1,443	7,209	1,828,489	86,447	1,914,936	⅜d., $\frac{11}{16}$d., and $\frac{5}{16}$d.‖	Various, separate and special.
Wairarapa S. ..	1,281	5,409	1,830,025	36,990	1,867,015	..	Separate, $\frac{1}{10}$d., H. and C.A.
Hutt	590	5,750	1,025,108	61,536	1,086,644	⅜d. and ¼ ‡	Separate, ½d.
Sounds ..	573	747	171,095		171,095	..	
Marlborough ..	3,812	6,330	1,617,315	137,095	1,754,410	..	
Kaikoura ..	673	1,575	303,534	7,341	310,875	⅜d.	
Collingwood ..	1,029	2,509	215,733	40,100	255,833	..	Special, ½d.
Waimea ..	1,662	8,591	1,080,854	7,960	1,088,814	⅜d.	⅕d. separate, H. and C.A., and $\frac{1}{12}$d. on Stoke Riding; ½d.* special in special rating district.
Buller ..	1,818	4,833	293,140	390,326	683,466	1½d.	
Inangahua ..	2,256	4,254	441,647	471,134	912,781	1½d.	Special, $\frac{5}{16}$d. and ½d. in Reefton Town, 2½d. in Boatman's irrigation district.
Grey	1,452	4,592	405,097	500,000	905,097	1½d.	⅜d. separate, H. and C.A.
Westland ..	4,420	4,723	179,200	1,114,597	1,293,797	1½d.	
Amuri ..	2,362	916	619,584	..	619,584	½d.	¾d. and $\frac{7}{16}$d., special.
Cheviot ..	322	1,042	496,326	..	496,326	¾d.	
Ashley ..	1,627	11,913	3,525,007	40,235	3,565,242	..	
Selwyn ..	2,597	30,090	6,048,499	..	6,048,499	..	½d. separate, H. and C.A.
Akaroa ..	353	3,886	1,086,785	6,366	1,093,151	⅜d.	½d. special.
Ashburton ..	2,542	10,820	3,409,946	7,374	3,417,320	..	
Geraldine ..	935	7,499	1,627,933	2,102	1,630,035	½d.	½d. to $\frac{7}{16}$d., separate.
Levels ..	273	7,723	1,272,000	..	1,272,000	1d.	
Mackenzie ..	2,537	1,514	742,421	9,854	752,275	½d.	

* On whole county. † North, West, and Central Ridings, ¾d.; South and East Ridings, ½d. ‡ Outlying district, ¾d.; road district, ½d.
§ ⅜d. on Native lands in occupation of Natives. ‖ $\frac{5}{16}$d., county; $\frac{11}{16}$d., Whareama District; ¾d., Alfredton District.

COUNTIES, 1895–96—*continued*.

Counties.	Area in Square Miles.	Population, Census, April, 1896.	Value of Real Property in County (including Town Districts, Road Districts, and Outlying).			Rates struck by County.	
			Rateable Property.	Unoccupied Crown and Native Lands.	Total Property.	General.	Other.
			£	£	£		
Waimate ..	1,343	4,777	2,258,349	12,360	2,270,709	$\frac{11}{16}$d.	$\frac{1}{8}$d., $\frac{3}{8}$d., and $\frac{5}{8}$d., separate.
Waitaki ..	2,333	8,876	2,319,294	27,207	2,346,501	$\frac{1}{16}$d.	$\frac{3}{16}$d. up to $\frac{3}{4}$d., separate.
Waihemo ..	336	2,148	374,113	2,621	376,734	$\frac{3}{4}$d.	
Waikouaiti ..	318	4,389	460,000	20,000	480,000	$\frac{3}{4}$d.	
Peninsula ..	37	2,645	392,337	..	392,337	..	
Taieri ..	930	6,950	1,223,588	2,765	1,226,353	$\frac{3}{4}$d.	$\frac{1}{8}$d. separate, H. and C.A.; $\frac{3}{4}$d. special on Henley Drainage District.
Bruce ..	503	4,828	944,053	8,261	952,314	$\frac{3}{8}$d. and $\frac{3}{4}$d.*	$\frac{3}{8}$d. separate, Mokau Riding; $\frac{3}{8}$d., $\frac{9}{16}$d., $\frac{7}{16}$d., $\frac{5}{16}$d., $1\frac{1}{4}$d., $1\frac{9}{16}$d., and $\frac{5}{16}$d., in various districts.
Clutha ..	946	6,564	1,014,209	60,200	1,074,409	$\frac{3}{4}$d.†	$\frac{5}{16}$d. separate, H. and C.A.; $\frac{3}{16}$d. special, Clinton Riding; $\frac{1}{8}$d., Richardson Riding; and $\frac{1}{2}$d., South Molyneux Riding; and $\frac{3}{4}$d. separate, Catlin's Riding, and $\frac{1}{2}$d. Waipahi Riding.
Tuapeka ..	1,365	6,477	871,728	48,000	919,728	$\frac{3}{4}$d.	
Maniototo ..	1,239	3,742	523,695	..	523,695	$\frac{3}{4}$d.	
Vincent ..	2,684	4,090	525,312	40,000	565,312	1d.	$1\frac{1}{2}$d. and $2\frac{1}{2}$d., special.
Lake	3,712	2,663	297,867	38,128	335,995	1d.	1d. special.
Southland ..	3,852	21,603	3,499,408	1,394	3,500,802	$\frac{3}{4}$d.*	$\frac{1}{8}$d. separate, H. and C.A.; $\frac{1}{2}$d., special.
Wallace ..	3,404	6,657	1,198,768	144,059	1,342,827	$\frac{3}{4}$d.	$\frac{3}{8}$d. separate on part, and $\frac{1}{8}$d. on whole.
Fiord	3,040	151	..	..	..	..	
Stewart Island ..	651	244	3,426	78,000	81,426	$\frac{3}{4}$d.	$\frac{5}{16}$d. separate, H. and C.A.
Totals ..	..	..	75,021,467	7,510,442	83,763,322	..	
			1,231,413‡				

* On whole county. † On outlying. ‡ Aggregate value in counties where there are no local governing bodies, and consequently the respective values of private and other property cannot be distinguished.

SECTION VIII.—ACCUMULATION: PRICES AND WAGES.

Banks of Issue.

In December, 1896, only five banks of issue were doing business in New Zealand, the Bank of New Zealand and the Colonial Bank having amalgamated during the previous year. Two of the five banks were wholly New Zealand institutions, with a paid-up capital of £1,250,000, besides which the Bank of New Zealand has £2,000,000 of 4 per cent. guaranteed stock. The Government hold £500,000 of shares in the Bank of New Zealand. The total average liabilities of all five banks for the year 1896 in respect of New Zealand transactions were £15,520,431, and the average assets £16,900,199. The average amount on deposit during the year was £14,490,826, of which sum £1,039,961 belonged to the General Government. Deposits to the value of £8,133,274 were bearing interest, and £5,317,590 at call. The value of the notes in circulation of these banks was £946,365.

The development of banking in New Zealand since the year 1857 has been very great. Taking for each year the average of the four quarters' returns made by the banks of issue, the figures for 1857, 1873, 1883, 1893, and 1896 are:—

Year.	Deposits.	Assets.	Liabilities.
	£	£	£
1857	343,316	419,860	432,494
1873	4,713,806	7,267,720	5,538,030
1883	8,659,477	17,794,761	9,706,700
1893	14,433,777	18,255,534	15,489,633
1896	14,490,826	16,900,199	15,520,431

In 1873 the deposits of these banks were £16·38 per head of the population. In 1893 they were £21·82 per head, and in 1896, £20·5. The ratio of advances to deposits, which was 104·48 per cent. in 1873, reached its maximum in 1883, when it stood at 173·35 per cent. The proportion since that year fell, till in 1896 it was only 78·35 per cent.

In 1886 the average amount of advances made by the banks was £15,853,420, equal to £27·23 per head of the mean population. The advances gradually declined in amount and proportion to population until 1891, when they were in value £11,549,145, or £18·34 per head. During the years 1892 and 1893, however, there was a rise, but in 1894 a fall to £12,031,537 (£17·71 per head), and in 1896 to £11,354,505, or £16·06 per head, which is the lowest average since the year 1872. The discounts were also less in 1896 than in any year since 1872. The largest amount of discounts in any year was £6,061,959 in 1879, a rate of £13·53 per head, from which the fall has continued to 1896, when the sum was £1,756,791, or £2·49 per head.

The deposits, as stated in the returns for the March quarters of the years 1896 and 1897, were—

	£
Deposits not bearing interest, March quarter, 1897	5,735,945
" " " March quarter, 1896	5,157,296
Showing the large increase of	£578,649

in the amount held at call.

The fixed deposits show a reverse movement, but to a much less extent:—

	£
Deposits bearing interest, March quarter, 1897 ..	7,905,214
" " March quarter, 1896 ..	8,090,513
A decrease of..	£185,299

Besides the above, the Government had with the Bank of New Zealand £913,868 on deposit in March, 1897, against £1,214,197 in March, 1896.

The *Australasian Insurance and Banking Record* for May, 1897, shows the full extent of the decrease in fixed deposits and the increase in the amount not bearing interest, for the Australasian banks, in a statement which is quoted:—

SUMMARY FOR AUSTRALASIAN BANKS.

	March Quarter, 1896.	March Quarter, 1897.	Movement.
For all Australasian Banks—	£	£	£
Deposits not bearing interest (all colonies except Tasmania)	34,965,213	38,474,935	+3,509,722
Deposits bearing interest (all colonies except Tasmania) ..	63,228,833	59,262,566	−3,966,267

Special Banking Legislation.

An Act was passed in 1893 intituled "The Banks and Bankers Act Amendment Act," under which, notwithstanding anything in previous legislation, the shareholders or proprietors of any bank may, from time to time, by extraordinary resolution, authorise its capital to be increased to such an amount and upon such terms as are deemed by them to be expedient. The holders of shares in such increased capital may be granted special privileges notwithstanding anything contained in the charter of the bank.

Any increased capital may be raised by the issue of new shares of such amount as is determined on by extraordinary resolution of the shareholders or proprietors.

The Bank-note Issue Act of the same year provides that notes issued or circulated in the colony by any bank shall, to the amount of the authorised issue, be a first charge on all the assets and property (including the paid-up capital, uncalled capital, and reserve fund—"Banking Act, 1894") of such bank, and that the notes shall be payable in gold only at the office of the bank at the place of issue of the said notes.

The assets and property of a bank are defined as assets for the payment of debts or other obligations contracted or entered upon or due and payable in the colony.

The other clauses (Part II.) of the same Act were originally passed for twelve months only, but their operation was extended in 1894 for another twelve months —viz., till September, 1895. As amended by subsequent enactments, they run as follows: The Governor may declare by Proclamation the notes of any bank named to be a legal tender of money to the amount therein expressed to be payable. The period of time is to be limited by the Proclamation, and no such Proclamation is to be made unless the Governor in Council is satisfied that, as between the bank and its creditors, its assets in the colony exceed its liabilities in the colony. The bank must further pay all such notes in gold on presentation, after expiry of the time limited, at the office of the bank at the place of issue. At any time within six months after the period limited by the Proclamation,

the Colonial Treasurer, on being satisfied that a bank-note covered by the Proclamation has been presented and not paid, shall pay the same in gold to any *bonâ fide* holder.

On the 29th June, 1894, the Colonial Treasurer introduced in the House of Representatives three Bills relating to banking, which were thereupon passed through all stages and became law forthwith.

The most important of these, intituled "An Act to guarantee out of the Consolidated Fund a Special Issue of Shares by the Bank of New Zealand to the Amount of Two Million Pounds Sterling," provided for the increase of the capital by the issue of shares* to an amount not exceeding two million pounds sterling, in guaranteed shares of ten pounds each, without further liability. These shares are preferential in respect of both capital and dividend, and the liability of the holders of ordinary shares is to secure payment of the guaranteed shares and the dividends thereon. The directors can refuse to register the transfer of ordinary shares; and no transfer, though passed by directors, is to be held valid till authorised in writing by the President of the bank. The guaranteed shares are to be called in at the end of ten years, and cancelled on payment of the principal sum with accrued dividend. The rate of dividend on preferential shares is not to exceed 4 per cent. per annum, and is to be paid by the bank. The guaranteed or preferential shares and dividends thereon are to be a charge upon and, in case of default by the bank, payable out of the Consolidated Fund of the colony; but if at any time any money shall be payable under the guarantee, the assets and property of the bank are to be security for the repayment of money so advanced; if the money be not repaid, the Colonial Treasurer may appoint a Receiver.

One-half of the sum of two million pounds authorised by the Act to be raised is to be at the disposal of the bank for use in its ordinary business, and the remainder is to be invested as the Colonial Treasurer may approve, or as may be specially provided by law. Until the guaranteed shares are called in and cancelled, no dividend is to be paid to ordinary shareholders without the consent of the Colonial Treasurer, who is empowered to satisfy himself that any proposed dividend will not unduly affect the security of the colony in respect of the guarantee.

By section 5 of the Act, the Colonial Treasurer might require the directors to call up £500,000, being one-third of the reserve capital, within twelve months, and this has accordingly been done.

As provided by the Act, the head office of the bank has been removed to Wellington, and a new Board of directors elected. The Governor in Council has appointed a President, and an Auditor of the business outside the United Kingdom. An Auditor of the business within the United Kingdom has been appointed by the Agent-General.

If an unfavourable report by one or both of the Auditors, confirmed by the President, as to the conduct of the business of the bank, be received by the Colonial Treasurer, the directors are to amend the management in such manner as the Treasurer may demand in writing.

The shares held in the Bank of New Zealand Estates Company (Limited) by the bank are, pending the completion of liquidation, to be treated in valuing as at par.

"The Bank Shareholders Act, 1894," provides that the directors of any bank may decline to register any transfer of shares upon which there is any liability made by a shareholder to any person of whose responsibility they may not be satisfied. "The Bank Directors and Shares Transfer Act, 1894," gives authority to directors to refuse approval, without assigning reasons, to any transfer of shares on which there is liability. It limits the number of directors to not less than five or more than seven.

* By further Amendment Act these shares were to be issued in the form of negotiable stock certificates or warrants to bearer, of such amounts as the directors may determine. The certificates with warrants or coupons are transferable by delivery. The holders of stock certificates or warrants may exchange these for registered stock, which is made transferable in such amounts as directors may sanction. Shares or stock may be held by any person without limit as to number, provided that the total value does not exceed two millions sterling.

"The Bank of New Zealand and Banking Act, 1895," and its Amendment Act.

This Act was passed on the 4th of September, 1895. It provides for writing off the paid-up capital of the Bank of New Zealand (£900,000), together with the proceeds (estimated at £450,000) of the first call of £3 6s. 8d. on the reserve liability of £10 per share.

A sum of £500,000 new capital is raised by preferred shares, and issued to the colony in exchange for Government securities. The preferred shares bear interest at 3½ per cent. The bank may within six years repurchase them at par. Further share capital is created by a second call of one-third of the reserve liability (£3 6s. 8d. per share) in four instalments, and the final third may be called up at any time after the 31st December, 1898. The sum of one million pounds, required by the Share Guarantee Act of 1894 to be invested as the Colonial Treasurer might approve, is released for employment by the bank in its ordinary business. So long as the colony remains liable under the Act, one of the directors of the bank is to be appointed by the Governor, and one of the present directors is to resign to make way for the Government appointee.

An Assets Realisation Board is established to purchase all the assets of the Estates Company, and of the Auckland Agricultural Company, for the sum of £2,731,706, being the estimated value of the properties on the 31st of March, 1895, subject, however, to an adjustment of station accounts, the purchase-money to be paid in debentures issued by the Assets Board, having a nine years' currency and bearing interest at 3½ per cent. per annum from the 31st March, 1895, any deficiency to be guaranteed by the Government as a charge upon the Consolidated Fund of the colony.

Provision is made for securing the Government against loss on account of this guarantee, and the Colonial Treasurer may, in the event of any deficiency, appoint a Receiver in respect of the securities with the powers of a liquidator appointed by the Supreme Court. The Assets Realisation Board is a body corporate, consisting of three members, two appointed by the Governor and one chosen by the directors of the bank.

Section 3 of "The Banking Act, 1894," is repealed, and power is given to the Bank of New Zealand to purchase the business and assets of any other bank doing business in the colony, excepting such assets as are found to be bad, doubtful, or valueless. Any such purchase is conditional on ratification by the shareholders of the selling bank and the approval of Parliament. [*The business of the Colonial Bank of New Zealand has since been purchased under the authority given, the contract being approved under the Amendment Act of 1895, section 3, and subsequently ratified by the shareholders of the selling bank.*]

So long as the colony remains in any measure liable under the Act, or the Share Guarantee Act of 1894, the proprietors of the bank may not take any steps towards winding up or dissolving the bank.

The Assets Board are to draw up a balance-sheet every six months, and lay the same before Parliament.

Savings Banks.

The number of post-offices open for the transaction of savings-bank business at the end of 1896 was 371.

There were 32,982 new accounts opened in the year, and 22,907 accounts were closed. The total number of open accounts at the end of 1896 was 147,758, of which 108,249 were for amounts not exceeding £20.

The deposits received during the year amounted to £2,881,152 16s. 3d., and the withdrawals to £2,591,558 19s. 4d., the excess of deposits over withdrawals having thus been £289,593 16s. 11d. The total sum standing at credit of all accounts on the 31st December, 1896, was £4,311,634 13s. 9d., which gave an average of £29 3s. 7d. to the credit of each account.

The following were the securities, &c., standing in the name of the Postmaster-General on account of the Post-Office Savings-Bank Fund on the 31st December, 1896:—

Description of Securities, &c.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
"Aid to Public Works and Land Settlement Act 1896" 3½ per cent.	250,000	0	0	250,000	0	0
Consolidated Loan 1867 Debentures, 4 per cent.	13,000	0	0	12,480	0	0
"Consolidated Stock Act 1884" Debentures, 4½ per cent.	1,024,813	0	0	1,024,813	0	0
"Consolidated Stock Act 1884" Debentures, 4 per cent.	93,900	0	0	93,900	0	0
"Consolidated Stock Act 1884" Debentures, 3½ per cent.	433,800	0	0	433,800	0	0
Defence Loan 1870 Debentures, 4 per cent. ..	75,000	0	0	72,000	0	0
Defence Loan 1870 Debentures, 4½ per cent...	8,100	0	0	8,100	0	0
District Railways Purchasing Act Debentures, 4 per cent.	42,000	0	0	36,076	17	8
District Railways Purchasing Act Scrip, 4 per cent.	34,100	0	0	34,100	0	0
General Purposes Loan 1873 Debentures, 4 per cent.	5,200	0	0	4,342	0	0
"Government Loans to Local Bodies Act 1886" Debentures, 3½ per cent.	71,000	0	0	71,000	0	0
Greymouth Harbour Board Debentures, 5 per cent.	100,000	0	0	100,000	0	0
Hamilton Borough Debentures, 5½ per cent...	3,000	0	0	3,000	0	0
Hokitika Harbour Board Debentures, 5 per cent.	10,000	0	0	10,000	0	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4 per cent.	174,200	0	0	167,272	0	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4½ per cent.	20,900	0	0	20,527	10	0
Imperial Guaranteed Immigration and Public Works Loan 1870 Debentures, 4 per cent...	400,000	0	0	400,000	0	0
Land for Settlements Acts, 1892 and 1894, Debentures, 4 per cent.	129,100	0	0	129,100	0	0
"Land for Settlements Act, 1894," Debentures, 3½ per cent.	30,000	0	0	30,000	0	0
Land for Settlements Act 1892" Debentures, 4½ per cent.	53,966	0	0	53,966	0	0
"Lands Improvement and Native Lands Acquisition Act, 1894," Debentures, 4 per cent.	264,000	0	0	264,000	0	0
"Lands Improvement and Native Lands Acquisition Act 1894" Debentures, 3½ per cent.	25,000	0	0	25,000	0	0
"Native Land Purchases Act, 1892," Debentures, 4½ per cent...	125,000	0	0	125,000	0	0
North Rakaia River Board Debentures, 5 per cent.	2,000	0	0	2,000	0	0
Oamaru Borough Consolidated Loan 1893 Debentures, 5 per cent.	13,800	0	0	13,800	0	0
Oamaru Harbour Bonds, 5½ per cent. ..	32,000	0	0	32,000	0	0
Oamaru Harbour Advances, 1887, 5 per cent.	30,000	0	0	30,000	0	0
Patea Harbour Board Debentures, 4½ per cent.	10,000	0	0	10,000	0	0
Thames Borough Debentures, 6 per cent. ..	6,500	0	0	6,500	0	0
Thames Harbour Board Debentures, 5 per cent.	10,000	0	0	10,000	0	0
Treasury Bills, 3½ per cent.	367,600	0	0	367,600	0	0
Westport Harbour Board Debentures, 4½ per cent.	11,000	0	0	11,000	0	0
Westport Harbour Board Debentures, 5 per cent.	339,200	0	0	339,200	0	0
Totals	4,208,179	0	0	4,190,577	7	8

There are seven savings-banks in the colony not connected with the Post Office. The total amount deposited in them in 1896 was £473,636 15s. 1d., of which the deposits by Maoris comprised £339 17s. The withdrawals reached the sum of £469,091 18s. 2d., being less than the deposits by £4,544 16s. 11d. The total amount to the credit of the depositors at the end of the year was £754,228 13s. 10d., of which sum £288 17s. 9d. belonged to Maoris.

Summary of all Deposits.

If the total deposits at the end of the year be assumed to be equal to the average for the last quarter, then it may be affirmed that, exclusive of Government moneys, the deposits in the several banks of issue and in the two classes of savings-banks amounted at the end of 1896 to £19,275,698. In addition, there are the deposits with building societies, which in 1895 were £229,608; and it is known that there were also deposits with financial companies, of which no particulars have been supplied to the department. The known deposits reach an average of £27 6s. 3d. per head of the population, exclusive of Maoris.

Building Societies.

There were 57 registered building societies in operation in the colony at the end of 1895. Of these, 14 were terminable societies, the rest were permanent.

The total receipts by these societies during their financial year were £584,523, of which deposits comprised £224,590.

The assets at the end of the year were valued at £923,581. The total liabilities were: To shareholders, reserve fund, &c., £678,168; to depositors, £229,608; and to bankers and other creditors, £15,805.

Mortgages.

The total number of mortgages registered (excluding moneys lent under the Government Advances to Settlers Act) in the year 1895–96 was 9,413, representing an amount of £5,573,790. The total sum was advanced as under:—

£			
1,344,833	by 7,366	mortgages	not exceeding £500 each.
793,552	by 1,085	"	between £500 and £1,000 each.
1,728,200	by 823	"	between £1,000 and £5,000 each.
1,707,205	by 139	"	over £5,000 each.

The full amounts borrowed, classified to show the various rates of interest paid, were:—

£	
26,285	in small sums at less than 5 per cent.
833,226	at from 5 per cent. to 5¼ per cent.
732,764	at 5½ per cent.
116,600	at 5¾ per cent.
1,372,261	at from 6 per cent to 6¼ per cent.
371,896	at from 6½ per cent. to 6¾ per cent.
599,542	at from 7 per cent. to 7¼ per cent.
111,651	at 7½ per cent.
382,348	at 8 per cent.
173,416	in small sums, at rates above 8 per cent.
853,801	at rates which are not specified.

Friendly Societies.

The Registrar of Friendly Societies received returns for the year 1895 from 374 lodges, courts, tents, &c., of various friendly societies throughout the colony, also from 33 central bodies. The number of members at the end of 1895 was 30,905.

The total value of the assets of these societies was £581,119, equivalent to £18 16s. 1d. per member. Of the total assets, the value of the sick and funeral benefit funds was £522,339.

The receipts during the year on account of the sick and funeral funds amounted to £71,496, and the expenditure to £48,588, of which the sick-pay to members reached the sum of £30,955. In addition to the sick-pay, the sum of £28,943 was paid out of the medical and management expenses fund for attendance given and medicine supplied to the members and their families.

Life Insurance.

There were existing in the colony at the close of the year 1895 as many as 69,866 life insurance policies, an average of over 100 in every 1,000 persons living. The gross amount represented by these policies was £18,656,953, an average of £267 0s. 9d. for each policy, and of £26 14s. 1d. for every European inhabitant of the colony at the end of the year. The distribution of these policies among the various life assurance offices is shown in the following table:—

Name of Office.	Number of Years of Business in the Colony.	New Zealand Business only.	
		Number of existing Policies at End of Year 1895.	Gross Amount insured by Policies at End of Year 1895.
			£ s. d.
The Australian Mutual Provident Society	34	21,565	6,311,967 0 0
The Citizens' Life Assurance Company (Limited)	2	495	63,100 0 0
The Colonial Mutual Life Assurance Society (Limited)	12	3,879	1,051,279 1 11
The Equitable Life Assurance Society of the United States	11	808	351,864 0 0
The Mutual Assurance Society of Victoria (Limited)	12	1,408	277,554 17 11
The Mutual Life Association of Australasia	19	3,839	976,334 8 1
The National Mutual Life Association of Australasia (Limited)	16	3,743	910,496 9 8
The New York Life Insurance Company	9	161	62,391 0 0
The Life Insurance Department of the New Zealand Government	26	33,968	8,651,967 0 0
Totals	..	69,866	18,656,953 17 7

It will be observed that nearly half the policies are held in the Government Life Insurance Department. A special article

concerning this institution will be found in Part III. of this volume.

Industrial Life Assurance.

In addition to the ordinary life insurance transactions alluded to above, there were in 1895 two industrial life assurance offices doing business in New Zealand. The number of policies in existence and the gross amount insured by such policies at the end of the year were :—

Name of Office.	Number of Years of Business in the Colony.	New Zealand Business only.	
		Number of existing Policies at End of Year 1895.	Gross Amount insured by Policies at End of Year 1895.
			£ s. d.
The Citizens' Life Assurance Company (Limited)	2	8,848	176,270 18 7
The Provident and Industrial Insurance Company of New Zealand	6	6,236	146,066 5 10
Totals	..	15,084	322,337 4 5

Private Wealth.

The number and value of estates of deceased persons finally certified on which duty was paid during the years 1894, 1895, and 1896 are shown classified according to amount :—

Value of Estates.	1894.		1895.		1896.	
	Number of Estates.	Aggregate Value on which Duty was Paid.	Number of Estates.	Aggregate Value on which Duty was Paid.	Number of Estates.	Aggregate Value on which Duty was Paid.
£ £		£		£		£
100 to 500 ..	310	78,551	392	89,092	431	123,283
500 „ 1,000 ..	123	89,564	134	97,210	160	112,430
1,000 „ 2,000 ..	78	108,413	107	150,151	113	159,416
2,000 „ 3,000 ..	25	60,403	37	90,950	45	107,940
3,000 „ 4,000 ..	15	53,044	27	92,868	20	68,656
4,000 „ 5,000 ..	15	66,367	18	79,387	10	45,816
5,000 „ 7,500 ..	13	76,803	18	113,204	19	112,335
7,500 „ 10,000 ..	8	68,747	11	91,756	17	145,472
10,000 „ 15,000 ..	5	60,799	6	76,463	14	163,840
15,000 „ 20,000 ..	7	115,636	5	88,234	8	139,988
20,000 and over ..	10	442,138	12	594,991	18	987,180
Totals ..	609	1,220,465	767	1,564,306	855	2,166,856

On these data it is possible to compute roughly the total value of private property in the colony. This method of estimating the private wealth of a people by means of the probate returns may not be strictly accurate, and is indeed strongly objected to by some statisticians, but it was nevertheless selected by the late Professor Mainwaring Brown as the best and most trustworthy plan. Calculations of the wealth of the living on the proportional basis of amounts left by the dead have not been considered satisfactory in some of the Australian colonies, but in New Zealand, where wealth is more evenly distributed, the results have proved fairly comparable year by year, and for all practical purposes may be accepted as a good indication of the facts. Dividing the aggregate amount admitted to probate during a series of years by the number of *deaths* occurring within the same period, the average value of property left by each person dying is obtained. On the assumption that the average wealth of each person living is equal to that left by each person dying, the total aggregate private wealth may readily be found by multiplying the average amount left at death by the number of persons living. It is necessary for this calculation to take the average results for a series of years, as any inference drawn from the figures of a single year would be untrustworthy; for an increase in the death-rate must necessarily give a corresponding decrease in the estimated wealth, unless the value of estates admitted to probate maintains year by year the same ratio to the number of deaths. An epidemic among young children who have no property to leave would unduly lower the average; while, on the other hand, the deaths of a few wealthy persons would raise it abnormally. It must also be remembered, when using these figures for comparative purposes, that the lowness of the death-rate in New Zealand is in great measure due to the small mortality among infants. By putting the figures for several years together, and taking the average for the term, we may arrive at fairly correct results, as thus:—

Years, inclusive.	Amount sworn to.	Total Number of Deaths.	Average Amount left by each Person.	Average Number of Persons living.	Average Total Wealth for each Year of the Period.
	£		£ s. d.		£
1892–96	7,960,238	33,439	238 1 1	676,410	161,022,219

It is manifest, however, that this average does not exhibit with sufficient accuracy the actual *present* amount of wealth. If the average amount per head were the same at the end of the year 1896 as for the period 1892–96—viz., £238·05—then the total wealth possessed by the 714,162 persons in the colony on the 31st December of that year would be £170,007,843.

These figures, however, fall short of the full amount of private wealth, as the values sworn to do not include those estates on

which no stamp duty is payable—viz., land and goods passing to the husband or wife of the deceased, and properties under £100. The total of these must be considerable, and should give a substantial increase to the average amount per head, and therefore to the total wealth.

The estimated private wealth for each year since 1888 is shown by the following figures:—

Year.	Amount. £	Average per Head. £
1888	131,345,925	216
1889	133,135,134	215
1890	142,631,461	228
1891	145,780,502	230
1892	152,065,087	236
1893	156,058,273	232
1894	154,715,821	225
1895	152,918,021	219
1896	170,007,843	238

The Government Statistician of New South Wales estimated the private wealth of the seven colonies of Australasia for the year 1890 at £1,169,434,000.

It is interesting to compare this estimate of the wealth of the Australasian Colonies with the results of similar calculations for other parts of the world. A table giving this information for various countries has accordingly been introduced; but, in comparing the wealth of one country with another, it must be remembered that the purchasing-power of money in different parts of the world varies considerably, and without information on this head bare statements of wealth per inhabitant are of very little use, and often misleading. Besides this, the question as to what extent Government undertakes such functions as the construction and working of railways disturbs comparisons of private wealth. The figures are for the most part taken from Mulhall's "Dictionary of Statistics":—

WEALTH OF PRINCIPAL COUNTRIES.

Country.	Private Wealth. £	Average Amount per Head of Population. £
United Kingdom	9,400,000,000	247
France	8,598,000,000	222
Germany	6,437,000,000	133
Russia	5,089,000,000	55
Austria-Hungary	3,855,000,000	96
Italy	2,963,000,000	98
Spain	2,516,000,000	143
Portugal	408,000,000	83
Sweden and Norway	880,000,000	122
Denmark	404,000,000	192
Holland	980,000,000	213
Belgium	1,007,000,000	165
Switzerland	494,000,000	165
United States	12,824,000,000	205
Canada	980,000,000	196

In the year 1885 the property-tax returns gave £40,304,000 as the value of public property in the colony, including Crown lands, educational, municipal, and other reserves, with public works—namely, railways, telegraphs, lighthouses, buildings, harbour-works, and water-supply on goldfields. In 1888 the value of the above had risen to £42,505,000, and it is supposed that in 1895 the sum would probably be about £45,000,000. There are also from nine to ten millions of acres of lands the property of the Maoris. In 1888 the Native lands were valued at £3,000,000 sterling. The present value is probably not so much; some land has been sold, but, on the other hand, some of that retained may have increased in value. When the results of the work now in progress under the new Valuation Act are made known by the Valuer-General, more accurate figures than those given above will be available.

Earnings and Income.

The aggregate annual earnings of the people of New Zealand may be stated in round numbers at £26,500,000. To arrive at this estimate the method adopted has been to allot to each person the probable income earned in respect of the occupation set down against his or her name in the household schedules collected at the census of 12th April, 1896. Exception may no doubt be taken to the plan of basing a calculation on a series of arbitrary assumptions, but there is precedent for such a course. The results of the calculation are given (but without any guarantee of accuracy), similar figures having been called for in the past.

The estimated amount earned at their occupations by either sex is as follows: Males, £24,666,400; females, £1,781,048: estimated total earnings, £26,447,448.

This sum (£26,447,448) would give an average of £37 12s. per head of population of all ages and both sexes, and £90 per head of breadwinners; £103 for each male and £34 for each female: but it must be borne in mind that these figures represent approximately the *money earnings* only, no allowance being made for board, which in some cases (the domestic class, for instance,) represents a large proportion of the wages.

It is obvious, moreover, that as the above calculation is based on the earnings of the people in respect only of the occupation followed, and does not take into account income derived from investments, pensions, annuities, &c., received in addition, the amount stated must necessarily fall short of the true total. A computation of the gross incomes of the New Zealand people has therefore been made on Mr. Mulhall's method, which may briefly be described thus: Take 90 per cent. of agricultural, pastoral, and mining produce, and 60 per cent. of manufactures; compute transport at 10 per cent. on the gross value of the foregoing products; house-rent according to the nearest estimate; commerce at 10 per cent. on

the imports and exports; shipping, 30s. per ton; banking, 5 per cent. on banking power; and allow 10 per cent. on the total of the preceding items to cover the earnings of servants, professional men, Civil Service, &c. The method may answer fairly for comparative purposes.

The aggregate incomes of the people, calculated in this way, would amount to £30,725,000.*

This would give an average annual income of £44 (nearly) to every man, woman, and child in the colony.

The average earnings per inhabitant in other countries have been calculated on the above method by Mr. Mulhall, with the following results :—

Country.	Average per Inhabitant. £
United Kingdom	33·7
France	27·8
Germany	22·2
Russia	11·5
Austria	15·5
Italy	12·2
Spain	16·5
Portugal	12·1
Sweden	22·0
Norway	20·5
Denmark	32·5
Holland	22·6
Belgium	28·0
Switzerland	19·0
United States	39·0
Canada	26·0
Australia	40·2
Argentina	24·0

Wages.

The aggregate of wages paid in the colony for the year 1896 has been arrived at by assigning to each wage-earner the probable annual income each would derive from the profession or occupation followed. As in the case of income, the calculations made are put forward merely by way of an attempt to get as closely as possible to the facts, and because asked for; but no assurance whatever can be given as to the exactness of the conclusions stated.

The total sum paid in salary or wages during the year is, in this way, found to have been £13,537,783, of which £12,398,720 were

* This sum, being the total of *all* the incomes in the colony, much money is necessarily included several times over.

paid to males, and £1,139,063 to females, giving an average yearly earning of £84 2s. for the one sex, and £28 12s. for the other. Details for each class of employment are shown below. It is, of course, obvious that as the totals here given represent the gross sums paid in salaries or wages, they must, consequently, include much money counted several times over. As in the computation of incomes, so also in this, no allowance has been made for board.

Occupations.	Males.			Females.		
	Number of Wage-earners, 1896.	Average Annual Earnings	Aggregate Earnings, 1896.	Number of Wage-earners, 1896.	Average Annual Earnings	Aggregate Earnings, 1896.
		£	£		£	£
I. Professional	9,084	137·0	1,244,525	5,770	33·4	192,670
II. Domestic ..	3,715	63·9	237,270	21,135	27·1	572,295
III. Commercial	33,958	114·2	3,877,345	2,034	29·8	60,705
IV. Industrial ..	55,819	77·7	4,337,465	10,637	29·1	309,483
V. Agricultural, pastoral, mineral, &c.	44,238	60·1	2,659,610	172	20·6	3,535
VI. Indefinite ..	672	63·3	42,505	57	6·6	375
Totals ..	147,486	84·1	12,398,720	39,805	28·6	1,139,063

Total wages, males	£12,398,720
„ females	1,139,063
Total	£13,537,783

For wage-earners of both sexes the average yearly gain would, therefore, be £72·2 per head, a rate which compares favourably with the result of a similar calculation for the United Kingdom, made in 1884 by Professor Leone Levi (Mulhall's Dictionary), where the average earning per head is set down at £43.

Cost of Living.

An estimate made in 1894 of the cost of living in New Zealand showed a total expenditure of £23,349,623. This sum included, besides what was spent on necessaries—food, drink, clothing, fuel, light, rent, and furniture—the additional outlay on luxuries, *e.g.*, books, pictures, amusements, &c., and on things of occasional necessity, such as stimulants, medical comforts, personal attendance, and the like. The rate arrived at per head of population was £35 6s. 1d.; and this may fairly be taken as the probable average for 1897.

The average income per head was previously shown to be from £37 12s. to £44.

Mr. Mulhall, in his "Dictionary of Statistics," gives the average expenditure per head of population for various countries specified as follows:—

Country.	Average Expenditure per Head. £	s.	d.	Country.	Average Expenditure per Head. £	s.	d.
United Kingdom ..	29	14	9	Norway	19	0	0
France	23	19	4	Denmark	28	11	5
Germany	20	3	4	Holland	20	17	4
Russia	10	1	11	Belgium	25	8	2
Austria	14	4	9	Switzerland ..	18	0	0
Italy	11	11	0	United States ..	32	16	2
Spain	15	12	6	Canada	23	6	2
Portugal	11	5	6	Australia	33	10	3
Sweden	20	8	4	Argentina	27	9	1

The estimate for Australasia, as made in 1894 by Mr. Coghlan, then Government Statistician of New South Wales, was as high as £43 12s. 10d. per head.

Below are shown the quantities used per head of population in New Zealand of some of the main articles of consumption. The figures are averages for five years :—

AVERAGE CONSUMPTION.

Food, Drinks, and Stimulants.

Articles.	Average per Inhabitant.	
Wheat	.. bush.	6·00
Potatoes	.. lb.	470·00
Beef	.. lb.	107·20
Mutton	.. lb.	126·00
Butter	.. lb.	17·10
Cheese	.. lb.	4·40
Milk	.. gal.	22·50
Cocoa and chocolate	.. lb.	0·43
Coffee and chicory	.. lb.	0·46
Tea	.. lb.	5·88
Sugar	.. lb.	81·76
Rice	.. lb.	8·39
Fruits, dried (imported)	.. lb.	6·72
Fruits, fresh (imported)	.. lb.	22·06
Mustard	.. lb.	0·28
Pickles	.. doz. pts.	0·02
Sauces	.. doz. pts.	0·02
Spices and pepper	.. lb.	0·53
Salt	.. lb.	33·98
Vinegar	.. gal.	0·12
Tobacco, snuff, cigars	.. lb.	1·99
Spirits	.. gal.	0·69
Wine	.. gal.	0·16
Beer	.. gal.	7·69

Other Articles.

Kerosene	.. gal.	2·19
Soap (imported)	.. lb.	0·55
Soap, New Zealand	.. lb.	14·58
Candles (imported)	.. lb.	2·54
Candles, New Zealand	.. lb.	2·66
Matches	.. gross	0·17
Soda, carbonate	.. lb.	0·19
Soda, crystals	.. lb.	0·73
Coal	.. tons	1·11

Prices and Wages.

The average prices of produce, live-stock, provisions, &c., in each provincial district are given for the year 1896 in tabular form on pages 288 and 289. While the variations for the different districts are such as to render it in most cases inadvisable to show averages for the colony, this has nevertheless been done for the staples of food, *i.e.*, bread, meat, and milk, also for tea and sugar, which may almost be called necessaries. Averages for the colony, taken out for the years 1864, 1874, 1884, and 1896, indicate a decline in prices with the advance of time. In striking these, prices on the goldfields have not been taken into account:—

—		1864.	1874.	1884.	1896.
		s. d.	s. d.	s. d.	s. d.
Bread	per lb.	0 3½	0 2	0 1¾	0 1¾
Beef	per lb.	0 8¼	0 5	0 5	0 4
Mutton	per lb.	0 8¼	0 4	0 3½	0 3
Sugar	per lb.	0 6	0 5	0 4½	0 2¾
Tea	per lb.	3 0¾	2 9½	2 7½	2 1¾
Butter (fresh) ..	per lb.	1 11½	1 3	0 11	0 9
Cheese (colonial) ..	per lb.	1 4	0 9¾	0 9	0 5¾
Milk	per quart.	0 6¾	0 5	0 4¼	0 3¼

Rates of Wages.

The average rates of wages paid in 1896 in each provincial district for agricultural, pastoral, artisan, and servants' labour are given on pages 290 to 293.

An average for the colony, calculated for the years 1874, 1884, and 1896, would seem to show that wages for general labour and artisan's work have somewhat fallen during the period specified. But the average for artisans is hard to calculate, because rates vary for different kinds of skilled work, in which the number of persons employed vary also; or, otherwise expressed: (*a*) different trades command different rates; (*b*) all persons employed in the same trade do not receive the same wage; and (*c*) the number employed in one trade differs from the number employed in another.

—		1874.	1884.	1896.
		s. d.	s. d.	s. d.
General labourers ..	per day	7 0	7 0	6 9
Artisans—				
Bricklayers.. ..	„	11 6	11 3	10 0
Carpenters	„	10 9	9 6	9 0
Masons	„	12 0	11 3	10 3
Painters	„	No information	9 6	8 6
Plumbers	„		10 9	9 8
Smiths	„	10 9	10 0	9 0

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1896.

Produce, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield)
I. AGRICULTURAL PRODUCE.									
Wheat .. .. per bushel (60lb.)	4/6	4/ to 5/	4/6	4/2 to 5/	4/	4/9	4/6	4/6	4/6 to 5/
Barley .. .. per bushel (50lb.)	..	2/9 to 3/9	3/	2/9 to 4/	3/6	3/6	3/6	3/6	2/ to 4/
Oats .. .. per bushel (40lb.)	3/	2/6 to 2/9	3/	2/2 to 3/3	2/	2/6	2/6	2/	1/11 to 2/6
Maize .. .. per bushel (56lb.)	3/3	4/6	3/6	3/4 to 5/	..	4/	4/	3/6	3/ to 3/6
Bran .. .. per bushel (20lb.)	..	10d. to 1/	1/6	9d. to 1/	1/6	1/	10d.	8d.	9d. to 1/6
Hay .. .. per ton ..	£4/15	£3/15	£4	65/ to 90/	£2	£3/10	£5	£2 5/	£2 10/ to £4
II. FLOUR AND BREAD.									
Flour, wholesale .. per ton of 2,000lb.	£10/10	£12/5–£12/10	£13	£12–£14	£10	£12 5/	£12	£11	£11 to £12
Flour, retail .. per bag of 50lb. ..	5/6	6/9 to 7/	7/	6/3 to 7/6	6/9	6/9	6/6	6/	6/ to 8/6
Bread .. .. per 4lb. loaf ..	6d.	7d. to 8d.	7d.	6d. to 8d.	8d.	7d.	7d.	5d.	6d. to 8d.
III. LIVE-STOCK AND MEAT.									
Horses, draught .. per head ..	£15 to £40	£20	£20 to £30	£18 to £25	£25	£22	£20	£15 to £30	£14 to £30
Horses, saddle and harness .. per head ..	£5 to £20	£9 to £15	£10	£5 to £15	£15	£15	£12	£5 to £20	£7 to £18
Cattle, fat .. per head ..	£8	£5	£5 10/	£4 to £6	£6	£5	£8 10/	£4 to £6	£7 to £8 10/
Cattle, milch cows .. per head ..	£6	£4 to £5/10	£5	£3/10 to £6	£7/10	£6 10/	£6 10/	£4 to £5 10/	£4 to £6
Sheep, fat.. .. per head ..	12/	9/ to 11/	7/	6/ to 9/	8/	10/	16/	10/ to 14/	9/ to 15/
Lambs, fat .. per head ..	11/	8/ to 10/	5/	5/6 to 7/	8/	8/	13/	10/ to 13/	9/ to 10/6
Butchers' meat:									
Beef .. .. per lb.	5d.	2½d. to 4d.	4d.	2¾d. to 4d.	3d.	4d.	4½d.	4d.	4d. to 5d.
Mutton .. .. per lb.	3d.	2½d. to 4d.	3d.	2½d. to 3d.	2½d.	3½d.	4½d.	2d.	2½d. to 4d.
Veal .. .. per lb... ..	4d.	3d. to 6d.	4d.	3d. to 5d.	4d.	4d.	4½d.	3d.	1½d. to 6d.
Pork .. .. per lb.	5d.	4d.	5d.	4d. to 5d.	4d.	4d.	4½d.	4½d.	4d. to 8d.
Lamb .. .. per lb.	5d.	4d.	4d.	3d. to 6d.	4½d.	3½d.	4½d.	3d.	3½d. to 7d.
IV. DAIRY PRODUCE.									
Butter, fresh .. per lb.	11d.	7d. to 9d.	1/	6d. to 10d.	10d.	8d.	1/	9d.	6d. to 1/3
Butter, salt .. per lb.	8d.	5d. to 8d.	7d.	5d. to 7d.	9d.	7d.	10d.	6d.	6½d. to 1/
Cheese, colonial .. per lb.	5d.	4d. to 6d.	6d.	4½d. to 7d.	6d.	6d.	7d.	4d.	4½d. to 8d.
Cheese, imported .. per lb.	1/	7d.	..	7d. to 1/6	8d.	10d.	1/3	1/	..
Milk .. .. per quart ..	3d.	2½d. to 3d.	3d.	2d. to 3d.	4d.	4d.	6d.	3d.	2½d. to 4d.

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1896—continued.

Produce, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
V. FARM-YARD PRODUCE.									
Geese .. .. per pair ..	6/	5/ to 8/	6/	4/ to 9/	7/	5/	7/6	6/4	5/ to 7/
Ducks .. .. per pair ..	4/	2/6 to 5/	4/	2/6 to 4/6	3/6	4/	6/	4/	3/6 to 4/
Fowls .. .. per pair ..	3/6	2/6 to 3/6	3/	2/6 to 4/9	2/3	3/	3/	3/	2/6 to 3/
Turkeys .. .. per head ..	5/	2/6 to 5/	6/	3/6 to 7/6	5/	7/	10/	5/ to 10/	5/ to 6/6
Bacon .. .. per lb. ..	8d.	6d. to 8d.	10d.	5½d. to 8d.	6d.	8d.	7d.	6½d.	5½d. to 8d.
Ham .. .. per lb. ..	10d.	8d. to 9d.	1/	7d. to 9d.	7½d.	9d.	8½d.	7d.	6d. to 10d.
Eggs .. .. per doz. ..	1/	10d.	1/6	1/	11d.	1/	1/6	10d.	9d. to 1/6
VI. GARDEN PRODUCE.									
Potatoes, wholesale .. per ton ..	£6	£5 to £7	£4	£4 to £5 10/	£1 15/	£7	£6 10/	£6	50/ to 70/
Potatoes, retail .. per cwt. ..	6/	5/ to 8/	4/	5/ to 6/6	3/	9/	7/	8/	3/ to 4/
Onions .. .. per lb. ..	3d.	1d. to 2d.	2d.	1d. to 3d.	2d.	1½d.	3d.	1d.	1d. to 4d.
Carrots .. .. per doz. bnchs.	1/	3d. to 1/	2/	1/ to 2/	1/	3/	3/	8d.	8d. to 2/
Turnips .. .. per doz. bnchs.	1/	3d. to 1/	2/	1/ to 2/	1/	3/	3/	9d.	8d. to 2/
Cabbages .. .. per doz. ..	1/6	1/ to 2/	2/6	1/ to 2/6	2/	3/6	3/	1/	8d. to 3/
VII. MISCELLANEOUS ARTICLES.									
Tea .. .. .. per lb. ..	1/10	2/ to 2/6	2/6	1/6 to 2/6	2/	2/	1/9	1/6 to 3/	1/9 to 2/6
Coffee .. .. per lb. ..	1/10	1/6 to 1/8	1/9	1/4 to 2/	1/9	2/	1/6	1/4 to 2/	1/6 to 1/9
Sugar .. .. per lb. ..	2½d.	3d.	3d.	2½d. to 3d.	2¾d.	3d.	3d.	2½d.	2½d. to 3½d.
Rice .. .. per lb. ..	3d.	2d. to 3d.	3d.	2½d. to 3d.	3d.	3d.	3d.	2½d.	2d. to 4d.
Salt .. .. per lb. ..	1d.	1d.	1d.	¾d. to 1d.	1d.	1d.	1d.	¾d.	½d. to 2d.
Soap .. .. per cwt. ..	12/ to 21/	18/	18/	15/ to 25/	16/	16/	20/	18/	11/ to 15/
Candles .. .. per lb. ..	8d.	7½d. to 8d.	9d.	6d. to 8d.	9d.	8d.	8d.	7d.	5d. to 8d.
Tobacco .. .. per lb. ..	5/6	5/6	5/6	4/9 to 6/6	5/6	5/6	5/6	5/	5/ to 6/6
Coal .. .. per ton ..	30/	45/ to 50/	40/	32/ to 46/	40/	31/	19/	35/	20/ to 25/
Firewood .. .. per cord ..	35/	20/	30/	16/ to 36/	48/	29/	25/	40/	12/ to 28/
VIII. BEER, WINE, SPIRITS.									
Beer, colonial .. per hhd. ..	£4	£4 to £6	£4 10/	£4 to £5	£4 13/	£4 10/	£4 10/	£4	80/ to 93/
Beer, English, bottled per doz. qts. ..	13/6	17/ to 18/6	14/6	12/6 to 15/3	15/	15/	15/	14/	13/6 to 18/
Brandy .. .. per gallon ..	27/	£1 10/	30/	24/9 to 30/	26/	25/6	26/	28/	22/ to 28/
Rum .. .. per gallon ..	27/	28/ to 30/	27/	22/ to 28/	26/6	24/	23/	25/	21/ to 24/
Whisky .. .. per gallon ..	27/	£1 10/	30/	24/6 to 28/	29/	25/	24/	27/6	22/6 to 28/
Gin .. .. per gallon ..	20/	24/ to 30/	24/	20/ to 28/	20/	18/6	24/	22/6	18/ to 25/
Wine, Australian .. per gallon ..	13/6	18/ to 25/	16/	12/6 to 25/	15/	13/6	13/	17/6	10/6 to 22/
Wine, European .. per gallon ..	17/	25/ to 27/	25/	16/ to 30/	17/6	15/6	18/	20/	15/ to 24/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1896.

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield)
1. AGRICULTURAL LABOUR.									
Farm-labourers:									
With board, per week	12/ to 20/	10/ to 20/	15/ to 20/	10/ to 20/	10/–20/	10/ to 20/	20/ to 25/	10/ to 20/	12/6 to 17/6
Without board, per day	5/	5/ to 6/	..	6/ to 7/	7/	5/	9/	5/	..
Ploughmen:									
With board, per week	15/ to 17/6	20/ to 25/	25/	15/ to 25/	22/6	20/	..	17/6	17/6 to 20/
Without board, per day	6/	5/	..	7/ to 8/	8/	..	..	5/6	..
Harvesters:									
With board, per week	20/ to 25/	15/ to 20/	25/	20/ to 25/	30/	20/	..	30/ to 40/	20/ to 25/
Without board, per day	..	5/	..	7/ to 8/	8/6	..	..	7/6	..
Threshers:									
With board, per week	20/ to 25/	15/ to 20/	[illegible]/	20/ to 25/	25/	20/	..	..	22/6
Without board, per day	6/6	5/	..	9d. to 1s. per hour	1s. per hour	..	..	10d. to 1s. per hour	10d. to 1s. per hour
2. PASTORAL LABOUR.									
Shepherds, with board, per annum ..	£50 to £55	..	£65 to £78	£50 to £75	£52	£45	..	£52 to £65	£50 to £60
Stockkeepers, with board, per annum ..	£50 to £60	..	£65 to £75	£50 to £75	£52	£65	£65	£52 to £65	£52 to £70
Station-labourers:									
With board, per week	10/ to 15/	..	15/ to 25/	15/ to 25/	20/	25/	..	15/ to 20/	15/ to 17/6
Without board, per day	..	..	..	6/	6/	..	..	5/ to 6/	5/ to 6/
Shearers, without board, per 100 sheep shorn	17/ to 20/	17/6 to 20/	20/	16/8 to 20/	17/6	17/	..	16/8	15/ to 17/6
Men-cooks on stations, with board, per week	20/	15/	25/ to 30/	20/ to 30/	20/	20/	..	20/ to 25/	15/ to 25/
3. ARTISAN LABOUR (per day, without board).									
Masons	8/	7/ to 12/	10/	7/ to 12/	9/	10/	14/	10/ to 11/	11/ to 12/
Plasterers	8/	6/ to 12/	10/	8/ to 12/	9/	14/	13/	8/ to 10/	10/ to 12/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1896—*continued.*

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
3. ARTISAN LABOUR (per day, without board)—*continued.*									
Bricklayers	8/	7/ to 12/	10/	7/ to 12/	8/	10/	13/	10/ to 11/	10/ to 12/
Carpenters	7/ to 8/	8/ to 10/	10/	6/6 to 10/	8/	9/	12/	8/ to 10/	8/ to 12/
Smiths	7/ to 8/	8/ to 9/	10/	7/ to 10/	9/	9/	12/	8/ to 10/	8/ to 10/
Shipwrights	8/	..	12/	9/ to 12/	9/6	10/	12/	8/ to 12/	8/ to 12/
Plumbers	7/	8/ to 10/	10/ to 12/	12/	10/	10/	10/	8/ to 10/	10/ to 12/
Painters	8/	8/	8/ to 9/	10/	10/	9/	9/8	7/ to 8/	8/ to 10/
Saddlers	6/ to 7/	7/ to 8/	8/ to 10/	9/6	8/6	8/	8/	7/ to 8/	8/ to 9/
Shoemakers	6/6	9/	8/ to 9/	9/	7/6	8/	8/	7/ to 8/	7/ to 8/
Coopers	6/	7/ to 9/	10/	7/ to 10/	10/	8/	12/	8/ to 10/	7/ to 8/
Watchmakers	8/	9/	10/	8/6 to 12/	10/	10/6	10/	8/ to 10/	7/6 to 10/
4. SERVANTS.									
Married couples without family, with board, per annum	£52 to £60	£50 to £75	£80 to £95	£50 to £80	£70	£60	£70	£60 to £70	£65 to £70
Married couples with family, with board, per annum	£40 to £45	£52	£80 to £85	£50 to £70	£60	£80	£50	£50 to £65	£50 to £62 10/
Grooms, with board, per week ..	15/ to 20/	15/ to 20/	20/ to 25/	15/ to 25/	25/	25/	40/	20/ to 25/	15/ to 17/6
Gardeners:									
With board, per week	15/ to 20/	15/ to 20/	25/	15/ to 30/	30/	30/	..	20/ to 25/	15/ to 22/6
Without board, per day	..	..	..	6/ to 7/	..	6/	7/	5/ to 6/	6/
Cooks, with board, per week	20/	12/ to 20/	12/ to 20/	12/6 to 30/	20/	20/	20/	12/ to 15/	17/6 to 20/
Laundresses, with board, per week ..	15/ to 20/	15/	12/ to 20/	10/ to 20/	20/	15/	15/	12/ to 15/	13/6 to 15/
General house-servants, with board, per week	10/ to 12/	8/ to 12/	12/ to 14/	8/ to 12/6	12/	10/	12/6	8/ to 12/	10/ to 15/
Housemaids, with board, per week ..	12/	8/ to 15/	10/ to 12/	7/ to 15/	10/	15/	15/	7/ to 10/	10/ to 12/6
Nursemaids, with board, per week ..	6/	5/	4/ to 8/	5/ to 10/	6/	8/	7/6	5/ to 10/	6/ to 8/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1896—*continued.*

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
4. SERVANTS—*continued.*									
Needlewomen:									
With board, per week	..	..	..	..	20/	18/	20/	10/ to 12/	..
Without board, per day (lunch always provided)	3/	2/6 to 3/	3/	3/ to 5/	..	..	..	3/ to 5/	3/
5. MISCELLANEOUS.									
General labourers, without board, per day	6/	6/	8/	6/ to 8/	6/	7/	9/	4/ to 7/	6/ to 8/
Stonebreakers, without board, per cubic yard	3/6 to 4/6	3/	..	2/6 to 3/3	..	5/	..	2/ to 2/6	2/ to 4/
Seamen, with board, per month ..	£4 to £6	..	£6 to £7	£6 to £7	£8	£6	£6	£4 to £7	£4 to £7
Miners, without board	8/	..	..	7/	10/	9/	10/	8/ to 10/	8/ to 10/
Engine-drivers, without board, per day	7/ to 9/	8/ to 10/	8/ to 9/	6/ to 10/	9/	7/6	12/	10/ to 12/	7/ to 11/
" " per week	..	..	..	20/ to 30/	..	..	..	..	..
Tailors, without board, per day	..	8/ to 12/	10/	8/ to 10/	7/	8/	10/	8/ to 10/	8/ to 10/
" " per week	40/ to 45/	..	..	50/ to 60/	..	..	..	..	50/
Tailoresses, " per day	..	3/	3/ to 5/	4/ to 6/	5/	2/6	5/	4/ to 5/	4/
" " per week	10/ to 21/6	..	..	12/6 to 22/6	..	..	..	..	15/
Dressmakers, " per day	3/	2/6	3/ to 4/	3/ to 8/	4/	..	5/	5/ to 6/	3/
" " per week	..	..	..	15/ to 26/	..	50/	..	..	30/
Milliners, " per day	2/9	5/	..	5/ to 10/	7/	..	..	5/ to 6/	3/
" " per week	..	..	30/ to 50/	12/ to 30/	..	40/	20/	..	30/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1896—*continued.*

Description of Labour.			Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
5. MISCELLANEOUS—*continued.*											
Machinists,	"	per day	3/6	3/6	..	3/ to 5/	6/	..	..	4/ to 5/	3/
"	"	per week	...	..	20/	20/ to 30/	..	15/	15/	..	20/
Storekeepers,	"	per day	7/	7/ to 10/	..	6/ to 10/	7/	..	..	5/ to 7/	8/ to 10/
"	"	per week	..	..	50/ to 60/	30/ to 50/*	..	60/	60/	..	..
" assistants,	"	per day	5/6	5/ to 6/	..	5/ to 7/	..	..	..	4/ to 5/	2/6 to 8/
" "	"	per week	..	..	20/ to 40/	18/ to 40/	30/	40/	50/	..	25/
Drapers' assistants,	"	per day	5/6	6/ to 8/	..	6/ to 8/	..	..	..	4/ to 7/	6/8
"	"	per week	..	..	40/ to 80/	30/ to 50/	30/	50/	60/	.	40/
Grocers' assistants,	"	per day	5/6	5/ to 6/	..	6/ to 7/	..	..	..	4/ to 7/	2/6 to 8/
"	"	per week	..	..	10/ to 25/	30/ to 40/	30/	40/	50/	..	..
Butchers,	"	per day	..	5/ to 6/	..	6/ to 8/	8/	..	..	6/ to 8/	6/8
"	"	per week	30/ to 40/	..	30/*	20/ to 60/	..	45/	40/	..	40/ to 50/
Bakers,	"	per day	..	5/ to 6/	..	6/ to 10/	8/	..	..	6/ to 8	6/8
"	"	per week	25/ to 35/	..	40/ to 60/	20/ to 50/	..	50/	60/	..	40/ to 60/
Storemen,	"	per day	..	5/ to 8/	..	6/ to 8/	8/	..	..	6/ to 8/	6/8
"	"	per week	30/ to 40/	..	40/ to 50/	40/ to 42/	..	30/	60/	..	30/
Compositors,	"	per day	..	6/ to 8/	8/ to 9/	7/6 to 9/	9/	..	..	8/ to 10/	10/
"	"	per week	40/	..	..	50/ to 60/	..	40/	50/	..	50/ to 54/

* With board.

SECTION IX.—CROWN LANDS.

A SUMMARY of the transactions in Crown lands during the last eleven years will be found in the next two tables. The first shows the acreage of land taken up for settlement, and the second the number of holdings under each description of tenure (the lands held under pastoral, license and miscellaneous leases, such as for timber and flax-cutting, coal-mining, &c., not included). Tables III. and IV. show the total acreage taken up year by year since 1889 in each land district, and the number of holdings, grouped according to size, the areas varying from less than one acre in extent to 1,000 acres and over.

Particulars as to the extent of lands held under pastoral leases, &c., and which are not dealt with in the succeeding tables, were in March, 1897, as under:—

Pastoral leases—	
Number of holders	831
Approximate area	10,065,738 acres.
Rent paid during year	£73,125
Miscellaneous leases—	
Number of holders	1,500
Area held	262,107 acres.
Annual rental	£11,661

A full description of the various tenures under which land is dealt with in the colony is given in the article entitled "The Land System of New Zealand," in Part III. of this book.

I.—Area of Land taken up under Various Tenures (excluding Pastoral Runs and Miscellaneous Leases and Licenses) during Each of the Years ending 31st March, 1887-97.

—	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	1892–93.	1893–94.	1894–95.	1895–96.	1896–97.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cash lands	32,633	28,229	68,498	46,922	100,014	40,501	36,327	34,999	38,695	26,575	28,485
Deferred payments	50,527	41,100	54,419	41,376	34,091	40,467	21,084	12,669	5,454	456	..
Perpetual lease and small areas ..	50,329	72,401	204,749	236,905	288,917	282,547	122,558	3,854	1,263	1,427	9,106
Occupation with right of purchase ..	..	..	..	..	..	..	54,271	108,133	75,478	84,968	59,648
Lease in perpetuity	..	..	..	..	..	..	55,320	179,993	91,799	122,350	104,927
Agricultural lease..	475	1,222	150	53	551	90	194	365	45	36	13
Occupation lease under "The Mining District Land Occupation Act,1894"	..	..	..	..	..	..	..	..	..	2,931	2,817
Village settlement—											
Cash	227	66	664	656	210	429	528	2	24	9	4
Deferred payment	585	1,316	1,182	782	370	182	391	..	..	..	..
Perpetual lease..	..	..	622	1,729	954	893	2,636	..	..	..	..
Occupation with right of purchase	..	..	..	..	..	..	..	1	23	2	4
Lease in perpetuity	..	..	..	..	..	..	4	3,953	4,050	3,365	1,317
Village-homestead special settlement	28,700	9,451	345	270	350	2,213	494	2,550	2,743	795	360
Special-settlement associations ..	43,873	31,740	19,905	4,970	71	1,923*	157,381†	68,852†	†51,346	†44,237	28,084†
Homestead	6,977	4,220	1,050	1,751	945	1,010	38	..	..	..	..
Special-settlement improved farms ..	..	..	..	..	..	..	..	..	9,731	28,348	4,882
Small grazing-runs and grazing-farms	105,857	156,482	161,652	60,340	86,161	159,465	92,927	252,693	117,846	46,407	68,934
Totals	320,183	346,227	513,236	395,754	512,634	529,720	544,153	668,064	398,497	361,904	308,581

* Perpetual lease. † Lease in perpetuity.

II.—Number of Holdings taken up under Each Kind of Tenure (excluding Pastoral Runs and Miscellaneous Leases and Licenses) during the Years ended 31st March, 1887–97.

—	1886-7.	1887-8.	1888-9.	1889-90.	1890-1.	1891-2.	1892-3.	1893-4.	1894-5.	1895-6.	1896-7.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
For cash	126	554	613	543	573	493	552	497	392	476	388
Deferred payments	557	319	397	304	258	223	169	96	47	6	..
Perpetual lease and small areas	272	367	768	756	788	824	385	17	3	7	19
Occupation with right of purchase	..	..	..	..	..	..	161	461	398	431	277
Lease in perpetuity	..	..	..	..	..	..	126	612	372	696	659
Agricultural lease	14	15	11	1	4	2	4	5	2	3	2
Occupation lease under "The Mining District Land Occupation Act, 1894"	..	..	..	..	..	..	..	..	..	69	48
Village settlement—											
Cash	65	68	143	159	87	88	75	3	23	16	4
Deferred payment	112	147	99	75	51	23	29	..	..	..	..
Perpetual lease	..	..	36	76	56	59	164	..	..	..	..
Occupation with right of purchase	..	..	..	..	..	..	..	5	30	3	4
Lease in perpetuity	..	..	..	..	..	..	2	203	232	193	102
Village-homestead special settlement	896	309	24	20	10	140	33	118	60	19	18
Special-settlement associations	455	309	209	46	2	13	838	290	262	238	142
Homestead	49	28	11	19	9	8	1	..	..	..	..
Improved-farm special settlement	..	..	..	..	..	..	..	..	107	315	45
Small grazing-runs	68	83	81	35	43	80	39	142	60	32	27
Totals	2,914	2,199	2,392	2,034	1,881	1,953	2,578	2,454	1,988	2,504	1,735

III. — LANDS TAKEN UP DURING THE YEARS ENDED 31ST MARCH, 1890-97 (EXCLUSIVE OF PASTORAL RUNS AND MISCELLANEOUS LEASES AND LICENSES).

Land District.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland	85,674	95,510	105,120	115,454	134,992	99,313	67,831	49,522
Hawke's Bay	53,204	45,603	36,008	49,831	24,356	20,141	16,353	22,858
Taranaki	39,177	33,785	55,237	49,064	13,954	35,113	55,850	22,002
Wellington	106,320	108,053	82,311	156,297	84,871	49,586	79,478	63,801
Nelson	9,321	23,808	12,992	17,797	36,739	34,906	19,421	14,462
Marlborough	4,333	11,023	3,016	8,055	8,227	18,353	15,858	20,858
Canterbury	22,141	133,761	62,831	12,777	94,861	33,744	14,827	22,654
Westland	598	313	1,010	162	1,346	1,826	1,765	3,865
Otago	55,314	47,450	141,565	90,043	159,050	80,439	70,238	79,212
Southland	19,672	13,328	29,630	44,673	109,668	25,076	20,283	9,347
Totals	395,754	512,634	529,720	544,153	668,064	398,497	361,904	308,581

IV.—HOLDINGS TAKEN UP DURING THE YEARS ENDED 31ST MARCH, 1890-97 (EXCLUSIVE OF PASTORAL RUNS AND MISCELLANEOUS LEASES AND LICENSES), CLASSIFIED ACCORDING TO SIZE.

Size.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.
	No.	No.	No.	No.	No.	No.	No.	No.
Under 1 acre	144	170	214	154	176	256	259	154
1 to 50 acres	701	531	581	727	739	696	719	588
51 to 250 acres	757	603	617	1,253	933	757	1,198	709
251 to 500 acres	260	307	255	264	341	169	232	178
501 to 1,000 acres	110	173	187	104	150	70	70	84
1,001 acres and upwards	62	97	99	76	115	40	26	22
Totals	2,034	1,881	1,953	2,578	2,454	1,988	2,504	1,735

SECTION X.—PRODUCTION.

Occupied Lands.

These have been returned by the Department of Agriculture for 1896 at 33,312,212 acres, including Crown lands leased for pastoral purposes only. The total number of holdings for the years 1868 and onwards will be found in the broadsheet at the end of the book.

A table is given showing the acreages of holdings, grouped according to size. Comparison of these groups with the census results for 1891 unfortunately cannot be made, because the table for that year excludes the pastoral leases.

Occupied Lands, Classified according to Sizes of Holdings.

[This table deals with the full extent of occupied land, *including* Crown pastoral leases.]

Sizes of Holdings.	Acres.
1 acre to 10 acres, inclusive ..	69,626
Over 10 " 50 " ..	316,493
" 50 " 100 " ..	548,035
" 100 " 200 " ..	1,369,170
" 200 " 320 " ..	1,387,431
" 320 " 640 " ..	2,449,451
" 640 " 1,000 " ..	1,486,693
" 1,000 " 5,000 " ..	4,929,539
" 5,000 " 10,000 " ..	2,422,197
" 10,000 " 20,000 " ..	3,293,706
" 20,000 " 50,000 " ..	4,913,228
Upwards of 50,000 acres	10,126,643
	33,312,212

From the total extent of occupied land shown for the colony, the area of the Crown pastoral leases can be deducted, and comparison then made for the three census years, 1886, 1891, and 1896. The figures are:—

	Census results, 1886.	Census results, 1891.	Figures returned by Department of Agriculture, 1896.
	Acres.	Acres.	Acres.
Total area of occupied land ..	28,169,788	31,867,505	33,312,212
Deduct Crown pastoral leases (figures from Crown Lands Report) ..	11,092,714	11,915,580	10,654,304
Total area of occupied land (after deducting Crown pastoral leases)	17,077,074	19,951,925	22,657,908

The increase of land occupied by settlement is found to be: For 1886–91, 2,874,851 acres; and for 1891–96, 2,705,983 acres.

Thus, according to the figures in the returns, the increases of occupied lands for the two periods, when Crown pastoral leases, which really cannot be said to represent settlement, have been excluded, are nearly equal. The increase from 1891 to 1896 is at the rate of 13·6 per cent. But this may prove to be less than the fact. Analysis of details leads to the belief that such is the case. When the result of the inquiry to be made at the end of this year is known, more can be said with safety on this matter.

The occupation of land must not be confused with ownership, because there are large parcels of lands held which are unused and unoccupied. Neither can lands occupied be properly compared with the returns of Crown lands alienated or in process of alienation, for certain lands have passed into the hands of Europeans which were never made waste lands of the Crown.

AGRICULTURE.

Until 1895 the agricultural statistics were collected and compiled by the Registrar-General, under authority of "The Census Act, 1877," annually in the month of February, except in census years, when the collection was made with the enumeration of the people. Under this Act statistics of the acreage in grass and in all kinds of cultivation were formerly taken in February; and, at the same time, the estimated yields of all the principal crops were obtained from the farmers themselves.

By the Agricultural and Pastoral Statistics Act, passed in 1895, the duty of collecting the returns devolved upon the Department of Agriculture. The plan adopted under the Act of 1895 is similar to that used in the United Kingdom, the account of land laid down in crop being taken much earlier than formerly, while estimates of produce are made after the results of threshing are known.

Statistics of the land in cultivation, and of live-stock, were accordingly taken in November, 1896, and the compiled results published in detail in the *New Zealand Gazette* of the 10th April, 1897, while the estimated yields of corn-crops (wheat, oats, barley, and rye) were made public on the 8th July following. A summary of the particulars then given is shown in the accompanying tables; but, in comparing these figures with the results obtained in former years, it must be remembered that, under the new Act, statistics of the acreage and crops of land held and cultivated by Maoris are included; whereas previously information about the farming carried on by Maoris was obtained only when a census of the Native race was taken.

The yields given in the table following were arrived at by taking a few of the average crops in each riding of every county.

A deduction has been made from the acreages under each kind of grain as first published, so as to counterbalance losses on account of the dry weather which prevailed prior to harvest and after the returns were collected.

ACREAGE AND ACTUAL YIELD IN PRINCIPAL CORN-CROPS, 1897.

District.	WHEAT.			OATS.			BARLEY.			RYE.		
	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.
Auckland ..	5,231	21	109,851	7,244	26	188,344	1,179	33	38,907	68	15	1,020
Hawke's Bay ..	998	25	24,950	6,529	23	150,167	2,127	31	65,937	58	20	1,160
Taranaki ..	1,948	30	58,440	4,618	33	152,394	523	32	16,736	64	23	1,472
Wellington ..	8,978	25	224,450	20,609	30	618,270	601	29	17,429	197	25	4,925
Marlborough ..	4,653	20	93,060	3,965	23	91,195	3,245	17	55,165	79	20	1,580
Nelson ..	3,914	15	58,710	5,246	21	110,166	3,657	22	80,454	54	18	972
Westland ..	..	..	..	..	..	..	..	..	..	..	..	..
Canterbury ..	174,579	21	3,666,159	130,113	24	3,122,712	10,929	30	327,870	924	20	18,480
Otago ..	58,307	29	1,690,903	194,273	35	6,799,555	7,552	29	219,008	1,801	20	36,020
Totals ..	258,608	22·92	5,926,523	372,597	30·15	11,232,803	29,813	27·56	821,506	3,245	20·22	65,629

NUMBER OF ACRES UNDER CULTIVATION IN EACH PROVINCIAL DISTRICT, 1897.

Provincial Districts.	In Grass, sown after land ploughed.	In Grass, surface sown: land not ploughed.	In Hay, included in either or both of the previous Columns.	In Bare Fallow.	In Grain-crops.	In Green and other Crops.	In Garden.	In Orchard.	Total in Grass, Crop, and Fallow.	In Plantations of Forest-trees.
Auckland ..	489,608	1,028,586	14,334	7,610	26,264	74,838	2,939	9,533	1,639,378	11,474
Taranaki ..	130,226	465,652	5,178	617	8,203	12,351	928	926	618,903	1,397
Hawke's Bay ..	352,995	1,320,888	8,297	3,935	11,406	29,148	1,165	999	1,720,536	3,695
Wellington ..	256,503	1,808,435	11,112	2,466	33,584	45,383	2,154	3,466	2,151,991	3,001
Marlborough ..	75,915	159,645	8,015	425	14,189	12,118	352	479	263,123	1,129
Nelson ..	101,885	227,444	4,892	477	14,617	26,923	510	1,800	373,656	1,451
Westland ..	10,334	29,621	740	23	13	1,669	89	194	41,943	2
Canterbury ..	1,531,011	431,945	49,661	10,292	349,188	233,656	4,805	2,891	2,563,788	20,807
Otago ..	1,360,243	264,342	7,237	31,313	281,949	275,574	3,982	2,003	2,219,406	4,674
Totals ..	4,308,720	5,736,558	109,466	57,158	739,413	711,660	*16,924	22,291	11,592,724	47,630

* 13,763 acres private garden, and 3,161 acres market garden.

NUMBER OF ACRES IN GRASS, UNDER EACH CLASS OF CROP, AND IN BARE FALLOW, 1888 TO 1897.

Year.	In Grass, sown after land ploughed.	In Grass, surface sown: land not ploughed.	In Hay, included in either or both of the previous Columns.	In Bare Fallow.	In Grain-crops.	In Green and other Crops.	In Garden.	In Orchard.	Total in Grass, Crop, Fallow, Garden, and Orchard.	In Plan-ations of Forest-trees.
1888	2,884,007	3,053,052	67,812	154,266	738,603	454,824	8,608	16,329	7,309,689	28,565
1889	2,941,888	3,337,423	50,656	142,747	793,866	454,243	8,561	15,246	7,693,974	33,938
1890	3,027,912	3,497,137	45,889	149,979	826,505	513,893	8,568	15,771	8,039,765	28,928
1891	3,250,543	3,715,675	44,045	210,509	703,329	582,439	9,810	17,047	8,489,352	35,310
1892	3,327,755	4,076,126	46,652	140,454	769,778	579,112	9,608	19,627	8,922,460	38,723
1893	3,611,393	4,650,652	61,811	154,254	753,091	544,355	9,763	20,085	9,743,593	40,401
1894	3,865,348	4,833,549	60,740	142,342	669,850	551,962	9,951	21,109	10,094,111	39,826
1895	3,908,581	4,921,136	56,614	140,494	560,179	597,686	10,263	21,401	10,159,740	55,386
1896	4,254,983	5,030,247	96,818	58,039	674,850	680,750	17,749	19,362	10,735,980	43,246
1897	4,308,720	5,786,558	109,466	57,158	739,413	711,660	16,924	22,291	11,592,724	47,630

The extent of land in cultivation (including sown grasses and land broken up but not under crop) amounted to 11,592,724 acres. Of this area, land under artificial grasses comprised 86·65 per cent.; land under grain-crops, 6·38 per cent.; land under green and other crops, 6·14 per cent.; land in garden and orchard, 0·34; and land in fallow, 0·49 per cent.

Wheat.

The wheat harvest of 1897 showed an average yield of 22·92 bushels per acre, the crop realised being 5,926,523 bushels, against 6,843,768 bushels in 1896, 3,613,037 bushels in 1895, 4,891,695 bushels in 1894, 8,378,217 bushels in 1893, and 10,257,738 bushels in 1892.

The Secretary of the Department of Agriculture gives the following calculation with the view of showing the apparent surplus of wheat after allowing for seed and for food purposes during the year, but it must be remembered that no attempt is made to compute the stocks of flour held by millers and merchants, which no doubt are of considerable magnitude.

	Bushels.
The quantity of wheat on hand at 10th November, 1896, as shown in *Gazette* notice of 28th January, was	1,310,027
From this must be deducted the consumption for three months, or to arrival of new wheat upon the market, say	1,114,821
Old wheat on hand at 10th February, 1897	195,206
Estimated total yield, crop for 1896-97	5,926,523
Total available for all purposes, period 10th February, 1897, to 10th February, 1898	6,121,729
The estimated quantity required for seed is, say, 300,000 acres at two bushels per acre	600,000
For human consumption, 743,214 inhabitants at six bushels per head	4,459,284
	5,059,284

Apparent surplus, 1,062,445 bushels.

Of the 258,608 acres in wheat this year, no less than 174,579 acres were in Canterbury and 58,307 acres in Otago.

The area under wheat, the estimated gross produce in bushels, and the average yield per acre for each of the last ten years were :—

Year.	Land under Wheat.	Estimated Gross Produce.	Average Yield per Acre.
	Acres.	Bushels.	Bushels.
1888	357,359	9,424,059	26·37
1889	362,153	8,770,246	24·22
1890	335,861	8,448,506	25·15
1891	301,460	5,723,610	18·99
1892	402,273	10,257,738	25·50
1893	381,245	8,378,217	21·98
1894	242,737	4,891,695	20·15
1895	148,575	3,613,037	24·32
1896	245,441	6,843,768	27·88
1897	258,608	5,926,523	22·92

The following gives the area in wheat, and the estimated produce, for the Australian Colonies for the season of 1896:—

Colony.	Wheat-crop, 1896.		
	Acres.	Bushels.	Bushels per Acre.
Queensland	27,090	123,630	4·56
New South Wales	596,684	5,195,312	8·7
Victoria	1,412,736	5,669,174	4·03
South Australia*	1,410,955	5,929,300	4·20
Western Australia..	23,241	188,076	8·09
Tasmania	64,652	1,164,855	18·01

* Estimate only. Statistics not collected in 1895 or 1896.

The yearly consumption of wheat per head of population in New Zealand, as previously stated, has been estimated at 6 bushels.

The difficulty of correctly computing the consumption of bread-stuffs is shown by the great differences in the estimates arrived at.

The average quantity required per head of the population (exclusive of that used for seed) has been calculated at 6·4 bushels for New South Wales, and 4½ to 5 bushels for Victoria, by statisticians in those colonies.

The average consumption of wheaten bread-stuffs in New Zealand thus appears to be somewhat higher than in Victoria.

The following is the average annual consumption of wheat per inhabitant in some of the principal countries of the world:—

United Kingdom	5·6 bushels.
Canada	6·6 "
France	8·1 "
Germany	3·0 "
Russia	2·1 "
Italy	5·4 "
United States	4·5 "

The English consumption during the last twenty-five years appears to have ranged from 5½ to 6 bushels per head of population. It is stated that the consumption in the United States is not now as high as 4½ bushels, the severe industrial depression of 1893 causing an increase in the use of cheaper grains. It is believed that Indian corn replaces at least one-fourth of the wheat that would otherwise be consumed.

Oats.

The crop of oats in 1897 was 11,232,803 bushels, against 12,263,540 bushels in 1896, a decrease of 1,030,737 bushels. Out of the total yield for 1897, only 1,109,175 bushels were grown in the North Island—the crop for the Middle Island being 10,123,628 bushels, of which 6,799,555 bushels were grown in Otago, and 3,122,712 bushels in Canterbury.

The extent of land in oats grown for grain in 1897 was 372,597 acres, against 364,747 acres in the preceding year. The breadth of

land in oats sown for green food or hay was 188,347 acres, an increase of 16,791 acres on the figures for 1896.

The average yield per acre was, in 1897, estimated at 30·15, and in 1896, 33·62 bushels.

The oat-crop for 1896 in the Australian Colonies was as follows:—

	Acres.	Bushels.	Average per Acre.
Queensland	922	10,887	11·81
New South Wales ..	23,750	374,196	15·8
Victoria	255,503	2,880,045	11·29
South Australia (1894)* ..	13,619	172,605	12·67
Western Australia ..	1,880	19,326	10·28
Tasmania	32,690	906,934	27·74

Barley.

Under barley 29,813 acres were returned in 1897, the estimated crop being 821,506 bushels, an average yield per acre of 27·56 bushels. In 1896 the area under barley was 35,356 acres, and the crop 1,035,762 bushels.

Potatoes.

The area under potatoes was 29,990 acres in 1897, against 31,997 acres in 1896.

A comparison of the gross yield of potatoes with the amount exported in each of the twelve years, 1883–94, shows that for such period an average of 597 lb. a head was retained in the colony. Allowing for waste, pig-feed, and seed, the average amount retained for human consumption was found to be 449 lb. a head.

Turnips.

Turnips and rape form a most important crop in a sheep-breeding country such as New Zealand, and in 1892 the area of land under this crop amounted to 422,359 acres. The returns for 1895 gave only 385,788 acres, but for the present year no less than 472,275 acres were set down as under this crop.

The cost of growing turnips sown broadcast and in drills is: Broadcast—Ploughing, 5s. 6d. per acre; harrowing, 3s. per acre; rolling, 1s. per acre; seed and sowing, 1s. 6d. per acre: total, 11s. per acre. Drill—Ploughing, 5s. 6d.; grubbing, 3s.; harrowing, 3s.; rolling, 1s.; drilling, 3s. 6d.; hand-hoeing, 10s.; horse-hoeing, 5s.; seed and sowing, 2s. 6d.; manure, 10s. to 15s.: total, £2 3s. 6d. to £2 8s. 6d. per acre.

Hops.

There were 746 acres under hops in 1897, as against 352 acres last year. No account of the produce for this or last year was taken, but in 1895 the yield was 7,556 cwt. Small as the area in hops is, it is more than sufficient to supply local requirements, as the import of hops in 1896 amounted only to 661 cwt., while the export reached 2,275 cwt. In 1895 the total quantity used by the breweries in the colony amounted to 3,793 cwt. Of the land under hops in 1897, 630

* Statistics not collected in 1895 or 1896.

acres were in the Waimea County, and 86 in Collingwood, both in the Provincial District of Nelson.

Tobacco.

The growing of tobacco does not progress in New Zealand. In 1889, 34 acres were being cultivated; in 1890, 25 acres; in 1891, 16 acres; in 1892, 6 acres; in 1893, 4 acres; in 1894, 4 acres; and in 1895, 5 acres, producing 1,599 lb. of dried leaf. Statistics of this crop were not taken in 1896 or 1897.

Gardens and Orchards.

The extent of land in garden was 16,924 acres, of which 13,763 acres were private gardens, and 3,161 acres market gardens. In artificial plantations of forest-trees there were 47,630 acres.

There were 22,291 acres in orchard in 1897, an increase of 2,929 acres on the area so returned in the previous year, and 361 acres were returned as "vineyard." The fruit-crop of the colony is supplemented by a considerable import from the Australian Colonies and Fiji.

Sown Grasses and Seeds.

New Zealand is essentially suited for grazing purposes. Wherever there is light and moisture, English grasses thrive when the natural bush and fern are cleared off. In fact, the white clover gradually overcomes the fern; and, from the mildness of the winter season, there are few places where there is not some growth, even in the coldest months of the year. In all parts of the colony stock live, although in varying condition, without other food than such as they can pick up. Sown grass land, as might be expected, heads the list of cultivations.

At the beginning of the year 1897 there were 10,045,278 acres under artificial grasses. Of these, 4,308,720 acres had been previously ploughed, presumably under grain or other crops, while 5,736,558 acres had not been ploughed. Much of the latter area was bush- or forest-land, sown down in grass after the timber had been wholly or partially burnt off.

Seeds are used much as in Great Britain, the following being a common mixture: Perennial ryegrass, 25 lb. to 30 lb. per acre; cocksfoot, 2 lb.; alsike, 2 lb.; timothy, 3 lb.; cowgrass, 2 lb.; red clover, 2 lb.; white clover, 2 lb.; rape, 1 lb.: total, 39 lb. to 44 lb. per acre. Pastures are renewed at intervals of from four to eight years, according to the nature of the land.

The following shows the acreage in sown grasses in the Australasian Colonies in 1896:—

	Acres.
Queensland	10,548
New South Wales	300,862
Victoria	180,251
South Australia (1894)	26,904
Western Australia	65,127
Tasmania	551,176
New Zealand	9,285,170

It will be observed that the acreage of land under sown grasses was nearly nine times as great in New Zealand as in the whole of Australia and Tasmania. When compared in size with the colonies of Australia, New Zealand is not large—about one-thirtieth of their total area—but in respect of grazing capabilities the relative importance of this country is much greater. Australia is generally unsuitable, owing to conditions of climate, for the growth of English grasses, and the amount of feed produced by the natural grasses throughout the year is very much less per acre than is obtained from the sown grass lands in New Zealand; indeed, it may be said that the average productiveness of grass-land is about nine times as great here as in Australia, or that land in this colony covered with English grasses may be considered equal, for grazing purposes, to an area of Australian land about nine times as great.

In addition to the artificially-sown pastures, the returns for 1897 show that 15,045,548 acres of native grass lands were utilised for stock-feeding by the runholders of the colony.

The value of the principal grain crops (wheat, oats, barley, and rye) for the current year has been estimated at £2,438,250. The quantities of other kinds of agricultural produce have not as yet been compiled; but, assuming the aggregate value of these to be the same as last year, the total value of all crops for 1896-97 would be, in round numbers, £5,210,000.

ANIMALS AND PRODUCE.

A comparative table is presented showing the increase in live-stock since the year 1858. The figures are taken from the census as far as 1891, but for 1895–96 and 1896–97 the results of the enumeration now made annually by the Department of Agriculture under "The Agricultural and Pastoral Statistics Act, 1895," have been made use of.

Year.	Horses.	Asses and Mules.	Cattle.	Sheep.	Goats.	Pigs.	Poultry.
1858 ..	14,912	122	137,204	1,523,324	11,797	40,734	*
1861 ..	28,275	153	193,285	2,761,383	12,191	43,270	236,098
1864 ..	49,409	339	249,760	4,937,273	12,005	61,276	378,414
1867 ..	65,715	323	312,835	8,418,579	11,964	115,104	676,065
1871 ..	81,028	397	436,592	9,700,629	12,434	151,460	872,174
1874 ..	99,859	267	494,917	11,704,853	14,276	123,921	1,058,198
1878 ..	137,768	241	578,430	13,069,338	14,243	207,337	1,323,542
1881 ..	161,736	362	698,637	12,985,085	11,223	200,083	1,566,114
1886 ..	187,382	297	853,358	16,564,595	10,220	277,901	1,679,021
1891 ..	211,040	348	831,831	18,128,186	9,055	308,812	1,790,070
1895-96	237,418	426	1,047,901	19,826,604†	*	239,778	*
1896-97	249,732	432	1,138,572	19,138,493†	*	209,853	*

* Poultry not enumerated in 1858, 1895-96, or 1896-97. Goats also not enumerated in the latter years. † Sheep numbers for April, 1895 and 1896.

The stock owned by Maoris in the year 1896, which is included above, comprised 314,406 sheep, and 29,125 cattle. The number of horses is not specified, but is known to be large.

The following gives the number of the principal kinds of live-stock in the several Australasian Colonies for the year 1895 :—

	Cattle.	Horses.	Sheep.	Pigs.
Queensland	7,012,997	444,109	19,587,691	89,677
New South Wales	2,465,411	518,181	56,977,270	273,359
Victoria	1,833,900	431,547	13,180,943	337,588
South Australia (1893) ..	675,284	201,484	7,325,003	88,153
Western Australia	187,214	50,001	2,132,311	28,396
Tasmania..	177,038	34,835	1,727,200	65,620
	1895-96.	1895-96.	30th April, 1895.	1895-96.
New Zealand	1,047,901	237,418	19,826,604	239,778

New Zealand thus takes second place in order for number of sheep, and fourth for the number of her cattle and horses.

Sheep.

The returns made to the Department of Agriculture show a smaller number of sheep for the years 1886 and 1891 than the census figures given previously, because the account was taken later in the year. The particulars are given for eleven years, distinguishing the number for the North from that in the Middle Island.

According to these returns, the flocks of the North Island increased from 5,285,907 sheep in the year 1886 to 9,131,736 in 1896, or at the rate of 73 per cent., while sheep in the Middle Island increased only from 9,888,356 to 10,006,757, or less than 1·19 per cent. in the same period. For the North Island the increase during the eleven years was 3,845,829 sheep, and for the Middle Island only 118,401.

Year.	North Island.	Middle Island.	Total.
1886	5,285,907	9,888,356	15,174,263
1887	5,506,485	9,649,141	15,155,626
1888	5,668,996	9,373,202	15,042,198
1889	5,990,244	9,433,084	15,423,328
1890	6,588,346	9,527,767	16,116,113
1891	7,159,927	9,593,825	16,753,752
1892	8,204,029	10,366,723	18,570,752
1893	8,685,361	10,695,008	19,380,369
1894	9,169,352	11,061,477	20,230,829
1895	8,994,646	10,831,958	19,826,604
1896	9,131,736	10,006,757	19,138,493

By the above figures, the increase in sheep between 1891 and 1896 amounted to 2,384,741, or at a rate of 14·23 per cent. The export and local consumption of wool developed from 111,537,546 lb. for the year ended September, 1891, to 132,299,607 lb. for the corresponding year of 1896. The export of sheepskins and pelts, which was in 1890 2,292,521 in number, reached 3,230,539 in 1895. And the destruction of rabbits, which provided an export of 12,543,293 skins in 1890, yielded a still greater number in 1895, when 15,229,314 skins were exported.

The increase of sheep has taken place notwithstanding the slaughter needed for an export of frozen meat increasing from 898,894 cwt. in the year 1890 to 1,134,097 cwt in 1895.

The proportion of small flocks of sheep has increased very considerably between the census years, and with smaller flocks the rabbit difficulty is easier to master than with large ones.

NUMBER OF FLOCKS, 1886, 1891, AND 1896.

Size of Flocks.	1886.	1891.	1896.
Under 500	6,024	8,272	12,028
500 and under 1,000	1,189	1,691	2,605
1,000 „ 2,000	747	969	1,460
2,000 „ 5,000	532	666	892
5,000 „ 10,000	263	287	340
10,000 „ 20,000	228	239	231
20,000 and upwards	166	169	147
	9,149	12,293	17,703

The average size of the flocks is found to have been 1,659 sheep for 1886, 1,363 for 1891, and 1,081 in 1896.

Of the provincial districts that of Canterbury had most sheep in 1896, Otago came next, and Wellington occupied the third place. The full particulars are:—

Provincial Districts.	Number of Sheep in 1896.
Canterbury	4,301,300
Otago	3,995,496
Wellington	3,746,622
Hawke's Bay	3,241,477
Auckland	1,741,379
Nelson	854,149
Marlborough	827,597
Taranaki	402,258
Westland	28,215
	19,138,493

It has been estimated that the annual consumption of mutton in New Zealand is equivalent to 2·25 sheep per inhabitant, and that the number of sheep required in the present year (1897) for food will be about 1,705,500. (Maoris, for the purposes of this calculation, have been included.)

Two important advantages that sheep-farming has in New Zealand are mentioned by Mr. J. A. Johnstone in the Year-book for 1894. They are: (1) the low cost of the production of mutton, (2) the high percentage of natural increase. Respecting the first point, it has been proved beyond all doubt that, under ordinary conditions, the very choicest of mutton can be so produced as to pay the grower handsomely when sold at 2d. per pound for the carcase at the nearest shipping-port. To the British sheep-farmer this statement, of course, is valueless by itself; but, when told that this mutton would cost the London butcher, delivered *ex* steamer at the dock, only 3½d. per pound, he will be able to realise in some measure

what a wonderful grazing-country New Zealand is, and to understand how it is that settlers of the right stamp have done so well. Then, with regard to the high percentage of increase, there need only be cited a few average returns from well-known flocks to show what excellent lambings New Zealand farmers obtain under good management.

LAMBING RETURNS.—AVERAGES.

Locality.	Breed of Flock.	Breed of Rams.	Breed of Ewes.	No. of Ewes.	Percentage of Lambs.	Remarks.
North Island ..	Lincoln	Lincoln	Lincoln	7,517	81·04	Land merely surface-sown in English-grass pasture.
" ..	"	"	"	5,301	85·05	
" ..	"	"	¾ Lincoln	12,177	100·00	
" ..	Romney	Romney	Romney	1,141	96·17	
" ..	Lincoln	Southd'n	Lincoln	2,033	94·71	
Middle Island	Merino	Merino	Merino	14,765	75·36	Mountainous country in n'tive past're, unimproved.
" ..	"	B. Leic'str	"	4,235	88·94	
" ..	Cross-bred	"	Cross-bred	8,624	80·82	In English-grass pasture.
" ..	Half-bred	"	Half-bred	2,747	82·79	
" ..	B. Leic'str	"	B. Leic'str	778	90·77	
" ..	Lincoln	Lincoln	Lincoln	452	88·08	
" ..	R. Marsh	R. Marsh	R. Marsh	253	111·46	
" ..	E. Leic'str	E. Leic'str	E. Leic'str	464	·93·34	
" ..	Shropshire	Shropshire	Shropshire	168	97·41	
" ..	Southd'n	Southd'n	Southd'n	114	96·87	

The above returns are fair average ones, but much higher might have been shown if exceptional cases had been selected.

As showing the actual cost of managing two large estates in New Zealand (Middle Island), No. 1 carrying 20,000 cross-bred sheep, and No. 2 carrying 40,000, the subjoined table may prove interesting :—

	No. 1. Per Head. s. d.	No. 2. Per Head. s. d.
Cost of shearing, including scouring and putting wool f.o.b.	0 6·5	0 6·3
Management, shepherding, dipping, &c.	0 10	0 9·6
Cost of providing special feed (turnips, green feed, chaff, &c.)	1 1	1 6·3
Cost of renewing English grass ..	2 0	1 5
Total per head	4 5·5	4 3·2

Cattle.

The increase of cattle between 1891 and 1896 was 216,070, or at the rate of 25·98 per cent. The rapid development of the butter and cheese industry, shown on page 202 under the head of dairy factories, in the industrial section, created a requirement for milch cows, which increased in number from 206,906 in 1891 to 276,217 in 1896, or at the rate of 33·50 per cent.

The cattle as enumerated in 1896–97 for each provincial district, with the increase on the number for the year 1895–96, are given in the next table:—

Provincial District.	Bulls.	Steers over Two Years Old.	Cows or Heifers (calved or to calve) for Dairy Purposes only.	Cows or Heifers (calved or to calve) kept solely for Breeding.	Heifers over Two Years Old intended for Dairying.	Heifers intended for Breeding only.	Cows or Heifers intended for Fattening.	Steers or Heifers under Two Years not otherwise enumerated.	Totals.
Auckland ..	4,424	58,521	60,145	27,966	9,498	8,612	15,184	102,095	286,445
Taranaki ..	2,721	31,718	62,585	9,326	4,799	1,656	7,495	81,218	201,518
Hawke's Bay	1,232	19,166	11,135	15,888	1,488	6,133	1,944	27,414	84,400
Wellington ..	3,193	41,144	50,816	28,998	4,783	7,951	8,398	78,441	223,724
Marlborough	261	1,143	3,994	427	369	141	479	4,665	11,479
Nelson ..	618	5,360	10,629	1,446	1,531	644	2,446	14,560	37,234
Westland ..	234	2,719	3,837	899	744	229	776	4,295	13,733
Canterbury ..	1,419	12,107	35,803	1,875	2,213	1,122	5,031	35,360	94,930
Otago ..	3,271	22,610	61,275	10,389	6,272	4,010	7,286	69,996	185,109
Totals, 1896-97	17,373	194,488	300,219	97,214	31,697	30,498	49,039	418,044	1,138,572
" 1895-96	18,117	158,898	276,217	98,275	33,339	31,307	42,556	389,192	1,047,901
Increase ..	..	35,590	24,002	..	..	..	6,483	28,852	90,671
Decrease ..	744	..	..	1,061	1,642	809	..	..	..

Out of a total of 1,138,572 cattle in the colony, the North Island is shown to have had 796,087, or 70 per cent., while the Middle Island had 342,485, or 30 per cent. Similarly, the dairy cows in the North Island numbered 184,681, and in the Middle Island 115,538.

Thus, the North Island, while gaining on the Middle Island as to number of sheep, contains more dairy cows and other cattle.

Horses.

The increase in horses is shown for three census years:—

Census Years.	Number of Horses.	Numerical Increase.	Increase per Cent.
1886	187,382	23,658	12·63
1891	211,040	26,378	12·50
1896	237,418		

Of 237,418 horses in the colony in January, 1896, 152,854 were light and 84,564 draught horses.

At the enumeration made in December, 1896, and January, 1897, the number of horses was found to have increased to 250,164 (including 432 mules and asses), for which particulars are given. It will be seen that the Provincial District of Auckland had by far

the most horses, Otago and Canterbury following, Wellington taking fourth place.

Provincial District.	Entires.	Geldings.	Mares over Two Years old.	Mares with Foal at Foot, or to foal this Season.	Colts and Fillies under Two Years old.	Totals.
Auckland ..	761	28,421	18,572	5,737	8,106	61,597
Taranaki ..	137	8,223	5,940	1,349	2,263	17,912
Hawke's Bay ..	232	8,051	5,625	1,232	1,733	16,873
Wellington ..	409	18,799	13,985	2,694	3,975	39,862
Marlborough ..	64	2,099	1,703	322	387	4,575
Nelson	77	3,752	3,053	638	810	8,330
Westland ..	21	994	628	166	187	1,996
Canterbury ..	415	21,176	17,564	2,530	4,201	45,886
Otago	389	23,291	19,921	3,394	6,138	53,133
Totals, 1896–97	2,505	114,806	86,991	18,062	27,800	250,164*
„ 1895–96	3,285	105,689	84,491	16,699	27,254	237,418
Increase ..	..	9,117	2,500	1,363	546	12,746
Decrease ..	780	..	..	..	..	..

* Including 432 mules and asses.

It has long been expected that the export of New Zealand horses to Australia and India would assume large proportions. So far, however, the trade has not developed to the extent anticipated. The opinion has been often expressed that more might be done than has been in the past. The following figures will show the position for the years 1885, 1890, and 1895 :—

Exported to	1885.	1890.	1895.
Victoria	133	92	10
New South Wales	2,687	197	53
Tasmania	113	27	1
Fiji	32	57	12
Bengal	34	235	94
Brazil	..	2	..
South Sea Islands	13	18	15
United Kingdom	..	..	5
United States of America (West coast)	10	..	3
	3,022	628	193

Pigs.

Pigs have been decreasing since 1891, when the number was 308,812, against 209,853 in 1896–97. The figures shown in the accompanying table are those compiled by the Agricultural Department, and exhibit a very great reduction in the last two years; but the statistics for 1896–97 were collected in November, 1896, while those for 1895–96 were taken in January, 1896, and this may partly account for the apparent decrease in the number of pigs during the last year, the months of November, December, and January being the principal breeding months. The Auckland Provincial District has far more pigs than any other.

NUMBER OF PIGS IN EACH PROVINCIAL DISTRICT.

Provincial Districts.	Boars for Stud Purposes.	Barrows and Sows over One Year old, for Fattening.	Sows kept solely for Breeding Purposes.	Barrows and Sows under One Year old.	Totals.
Auckland ..	1,458	12,733	7,948	37,789	59,928
Taranaki ..	386	2,491	2,256	12,539	17,672
Hawke's Bay ..	261	1,907	1,133	6,226	9,527
Wellington ..	761	3,958	4,434	23,132	32,285
Marlborough ..	90	562	456	2,591	3,699
Nelson ..	264	1,161	1,215	8,087	10,727
Westland ..	59	331	239	1,304	1,933
Canterbury ..	664	3,976	4,716	36,678	46,034
Otago	577	4,645	2,955	19,871	28,048
Totals, 1896–97	4,520	31,764	25,352	148,217	209,853
" 1895–96	5,729	39,699	30,485	163,865	239,778
Decrease ..	1,209	7,935	5,133	15,648	29,925

Ostrich-farming.

Answers to questions asked through the medium of the Department of Agriculture have been kindly supplied by Mr. L. D. Nathan, of Messrs. L. D. Nathan and Co., the owners of Whitford Park ostrich farm, Turanga Creek, near Auckland:—

Number of birds (male and female)?—79 cocks, 98 hens, 43 young birds, and 53 chicks.

Value of birds?—Merely nominal, ranging from £5 to £7 for young birds, up to £15 and £18 for matured.

Estimated return per bird: £2 15s. to £3 matured bird, £1 17s. young bird.

Are they specially fed?—Yes, but in winter only.

If so fed, description of food?—Maize and turnips.

If on grass, area to keep a bird for a year?—Allow one bird same area as two sheep.

Season for taking feathers?—Every eight months.

Estimated length of life?—This is unknown, but birds supposed to live eighty years.

Are they subject to disease?—They are at the Cape, but are wonderfully free in New Zealand.

Is the climate favourable for birds and plumage?—Yes.

Do New Zealand feathers compare well with those of other countries?—Yes.

Could the industry be recommended to the average New Zealand farmer?—Yes.

Is hatching by incubator, or by the birds themselves?—Either; but the latter system only is adopted at our farm.

Are the young hardy, or have they to be specially tended?—They require a little care and attention for the first three or four months.

Mining.

The natural mineral resources of New Zealand are very great, and have exercised in the past a most important influence on the development and progress of the colony. Gold to the value of £52,392,430 was obtained prior to the 31st December, 1896. In 1896 the value of the produce was £1,041,428. In the earliest years the gold was obtained from alluvial diggings, but at the present time much is taken from gold-bearing quartz, which is distributed widely through several parts of the colony, and thus there is a much better prospect of the permanency of this industry than alluvial diggings could give. The greater portion of the gold obtained is, however, still got from alluvial workings.

The yield of silver to the end of 1896 amounted to £181,852 in value, the quantity mined in 1896 having been 94,307 oz., valued at £10,589. Of other minerals, the value of the product to the same date amounts to £14,185,302, of which kauri-gum yielded £8,114,842, and coal, with coke, £5,831,914. The quantities and values of precious metals and minerals obtained during the year 1896, and the total value of all mining produce since 1853, are:—

	1896.		Total Value since 1853.
	Oz.	£	£
Gold	263,694	1,041,428	..
Silver	94,307	10,589	..
	358,001	1,052,017	52,574,282
	Tons.		
Copper-ore ..	..	..	17,866
Chrome-ore ..	..	..	37,367
Antimony-ore ..	21	450	52,204
Manganese-ore ..	65	205	57,993
Hæmatite-ore ..	..	..	226
Mixed minerals ..	37	1,335	72,890
Coal	792,851	428,648	5,807,133
Coke (exported) ..	105	263	24,781
Kauri-gum ..	7,126	431,323	8,114,842
		£1,914,241	£66,759,584

Of the gold entered for exportation during the year ended 31st March, 1897—viz., 256,913 oz., representing a value of £1,015,742—about 46 per cent. came out of quartz-mines; but, if the total yield of gold obtained in the colony be taken, the value of which to 31st March, 1897, is £52,668,246, about 20 per cent. came from quartz-mines, and 80 per cent., from alluvial workings.

Gold.

The history of the finding of gold in this colony was briefly sketched in the Year-books for 1893 and 1894, and need not, therefore, be repeated here, but a word may be said on recent develop-

ments in mining. Great changes have taken place since the early days, when a man wanted but a pick and shovel, tin dish and cradle, to enable him to earn a livelihood on the diggings. The rich shallow soil has been to all appearances worked out, the ground is getting deeper, the inroads of water more troublesome, and greatly-improved appliances are needed in order to wash away the masses of drift that overlie the gold-bearing layers on the bottom.

The difficulty for many years experienced in working the beds of the larger rivers has been at last overcome by the use of dredging machinery. On the Clutha River, where many dredges are at work, very few fail to pay interest on the capital invested in them. Dredging has not only been adopted for working river-beds, but has also been used to great advantage on river flats, which are known to contain large bodies of water, and cannot be profitably worked by any other means. So successful, indeed, has this method proved, that it seems likely to develop into a very considerable branch of the mining industry.

So numerous are rapid streams and rivers in New Zealand that water might easily be utilised to supply motive-power for mining machinery. It has been used at Skipper's for years to generate electricity by means of dynamos, the current being transmitted a distance of several miles over a high range for the purpose of driving a crushing battery. Great improvements have been made in the appliances since the method was first adopted, and at present some 67 per cent. of the power required to generate electricity is obtained in this way.

Skipper's was the first place where electricity was used to drive a crushing battery. The same force is employed to work a dredge on the Shotover River. Electricity has been adopted with equal success at the Brunner coal-mines, near Greymouth, for working the haulage and pumping machinery. It is also used for mining purposes at the Westport Coal Company's Denniston mines.

The total number of gold-miners employed in 1896–97 was 14,949, as against 13,226 for the previous year. The increase was principally in the Auckland District, where 1,423 more men were employed than in 1895–96. In some places, more especially in Otago, Nelson, and the West Coast, many of the miners do not depend entirely on mining, but employ a part of their time in farming and other pursuits.

The total quantity of gold entered for export during the years ending 31st March, 1896, and 31st March, 1897, for the several districts, and the total quantity and value of the gold exported from the colony from the 1st January, 1857, to the 31st March, 1897, are shown hereunder, but this does not necessarily include the whole of the gold produced, as no doubt much has been taken out of the colony from time to time by people who have evaded the duty, and a good deal has been used for making jewellery and ornaments:—

TABLE SHOWING THE QUANTITY AND VALUE OF GOLD ENTERED FOR EXPORTATION FROM NEW ZEALAND FOR THE YEARS ENDING THE 31ST MARCH, 1896 AND 1897, AND THE TOTAL QUANTITY AND VALUE FROM JANUARY, 1857, TO 31ST MARCH, 1897.

District.	Year ending 31st March, 1897.		Year ending 31st March, 1896.		Decrease for Year ending 31st March, 1897.	Total Quantity and Value from January, 1857, to 31st March, 1897.	
	Quantity.	Value.	Quantity.	Value.			
	Oz.	£	Oz.	£	Oz.	Oz.	£
Auckland ..	93,876	358,231	117,029	450,829	23,153	2,058,885	7,768,664
Wellington ..	..	..	..	..	..	188	706
Marlborough	789	3,070	3,173	12,681	2,384	84,991	331,032
Nelson ..	2,534	9,544	3,813	14,007	1,279	252,962	999,153
West Coast ..	71,548	286,261	89,721	358,870	18,173	5,678,349	22,566,687
Canterbury ..	..	..	..	..	..	48	192
Otago ..	88,166	358,636	88,954	359,694	788	5,308,105	21,001,812
Totals ..	256,913	1,015,742	302,690	1,196,081	45,777	13,383,528	52,668,246

It will be seen from the above table that there was last year a decrease in the yield of gold of 45,777 oz. or 15·12 per cent. on the figures for the preceding twelve months. This falling-off was general, each gold-mining district showing a decreased output.

Of the total quantity of gold entered for exportation last year Auckland contributed 36·54 per cent.; Marlborough, 0·31 per cent.; Nelson, 0·98 per cent.; West Coast, 27·85 per cent.; and Otago, 34·32 per cent.

Gold-mining on the west coast of the Middle Island is attracting the attention of capitalists, and numerous properties have been acquired in that part of the colony, as well as in the North.

In the Otago, Reefton, and Nelson districts the gold in the reefs generally occurs in a fairly free-milling state, presenting little difficulty in its recovery. In the Hauraki goldfields, however, only a small proportion of the gold is free-milling, the remainder existing in what is known as a refractory state—that is, the gold occurs either in so finely divided a form that the ordinary methods of amalgamation fail to recover a payable percentage, or it is associated with, or entangled in, base metallic minerals which necessitate the adoption of scientific, and often costly, methods of treatment. In these goldfields the successful use of the cyanide process is steadily extending, with the result that many ores that formerly were worked at a loss by amalgamation processes now yield regular returns on the capital invested.

Indeed, the cyanide process is the most noteworthy improvement as yet introduced in the treatment of gold- and silver-bearing ores. It is particularly suitable where the gold is found in the ore in fine particles; whereas, if the gold be at all coarse, cyanide will do no more than cleanse and brighten its surface and render it fitter for amalgamation. The process may be briefly described thus:

The ore is first dry-crushed, and the dust passed through a screen. The pulverised ore is then emptied into a vat and covered with a cyanide solution. The gold in the ore is dissolved by the cyanide, and, in order to separate the two, the liquor is leached off and run into a trough containing zinc turnings, where the action of the zinc precipitates the gold in a fine powder. The tailings from the leaching-vats are run over tables covered with copper-plates coated with quicksilver, and any particles of gold remaining in the ore are by this means arrested on the plates. It was at one time thought that dry-crushing would be a very expensive mode of reducing the ore, but the Waihi Company have proved the contrary. The cost of drying and crushing ready for the leaching-process is under 6s. a ton, and more gold is obtained in this way than is yielded by wet-crushing. It is found that in the latter process much of the precious metal is carried off with the water and does not remain in the tailings.

In recent experiments bromine and iodine have been used in conjunction with cyanide, with the two-fold result, it is said, of hastening the dissolution of gold and of saving some of the loss in cyanide. Seaweed has also been tried, and is reported to have a similar effect. In all likelihood, therefore, the method of treatment will one day be rendered at once cheaper, speedier, and more thorough than it is at present.

The two main obstacles in the way of the process are—first, the difficulty of reducing the base metals found in gold- and silver-bearing ores, of which copper and antimony are the most refractory; second, the trouble experienced in leaching ore in a slimy state, as the slime absorbs the cyanide solution, and is thereby enriched with gold. It then sets so closely that the gold solution cannot be filtered.

The working of quartz mines and deep alluvial drifts necessitates a large outlay of money before returns can be expected, and can only be undertaken when capital is available. In the case of quartz mines, the reef must be sufficiently opened to ascertain the value and extent of the ore reserves preparatory to the erection of reduction machinery, which must be constructed on the most modern principles to insure efficiency and economy in the handling and treatment of large bodies of ore.

The introduction of capital will have the effect of enabling the claims not only to be worked at greater depths than heretofore, but they will also be worked in a more systematic and economical manner. Modern machinery and appliances will be introduced and erected for the reduction and treatment of auriferous ores, and it is expected that a far larger percentage of the gold will be recovered than has been the case in the past.

The improved appliances introduced in dredging and hydraulic sluicing machinery have made it possible to work with profit alluvial ground and drifts that a few years ago could not be handled remuneratively on account of their low grade.

In the successful working of alluvial drifts containing only a few grains of gold to the ton or cubic yard, a large and constant supply of water is of primary importance, and to secure this the construction of expensive races must be undertaken as the initial step towards systematic development.

In the colony there are large areas covered with auriferous drifts which will prove remunerative if a sufficient quantity of water can be obtained to work them on an extensive scale; and the number of men who can be profitably employed in alluvial workings will always be in proportion to the quantity of water available.

The deep leads of the West Coast are coming into prominent notice, and, with systematic working and careful management, promise to develop into paying concerns.

Coal.

The vast extent of coal-measures in New Zealand will make coal-mining one of the largest industries in the colony, especially on the west coast of the Middle Island, where bituminous coal exists equal, if not superior, in quality to coal of the same class in any part of the world.

So long, however, as the harbour-works on that coast are unfinished, the output of coal must be limited by the requirements of the colony, as it is impossible to export at a profit save by shipping large quantities on one bottom, and in the present state of the harbours this cannot be done.

The harbour-works at Westport promise to be a complete success. Before these works began, the usual depth of water on the bar was from 9ft. to 14ft., and since the completion of the works the usual depth is from 18ft. to 20ft. The internal works for deepening and maintaining the deep water in the berthages and fairway inside the bar consist of half-tide training walls, to extend for a total length of 9,850ft., now under construction. The completion of these walls, with proposed dredging, is expected to maintain a greater depth in the fairway of the river, and a greater width of deep water for swinging vessels.

At Greymouth two breakwaters have been constructed at the mouth of the river to deepen the channel at the entrance, and enable larger steamers to enter. These, on the recommendation of the late Sir John Coode, have been carried out—the north breakwater 1,125ft., and the south breakwater 3,392ft., into the sea, to confine the river and direct the current square on to the bar. There are also internal training-walls constructed. These works have so far been perfectly successful; they have really done somewhat more than was expected of them. Prior to their initiation there was seldom more than 10ft. of water on the bar, and the channel was tortuous and constantly changing its position; now the channel is straight and permanent, and for the most time it has 25½ ft. at high-

water springs, and 8 ft. to 16 ft. at low-water springs. The average depth at high-water on the bar during the year 1892 was 18 ft. 10 in., in 1893 19 ft. 7 in., and in 1894, 20 ft. 7 in.

The progressive increase in the output of coal from 1878 to the end of 1896 is shown below:—

Year.	Raised in the Colony.		Imported.	Total raised in the Colony, and imported, per Annum.	Exported (excluding Coal for Fuel by Ocean Steamers).	Total Consumption of Coal within the Colony.	Yearly increase in Consumption within the Colony.
	Total.	Yearly Increase.					
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1878 ..	162,218	..	174,148	336,366	3,921	332,445	..
1879 ..	231,218	69,000	158,076	389,294	7,195	382,099	49,654
1880 ..	299,923	68,705	123,298	423,221	7,021	416,200	34,101
1881 ..	337,262	37,339	129,962	467,224	6,626	460,598	44,398
1882 ..	378,272	41,010	129,582	507,854	4,245	503,609	43,011
1883 ..	421,764	43,492	123,540	545,304	7,172	538,132	34,523
1884 ..	480,831	59,067	148,444	629,275	6,354	622,921	84,789
1885 ..	511,063	30,232	130,202	641,265	2,371	638,894	15,973
1886 ..	534,353	23,290	119,873	654,226	2,862	651,364	12,470
1887 ..	558,620	24,267	107,230	665,850	12,951	652,899	1,535
1888 ..	613,895	55,275	101,341	715,236	27,678	687,558	34,659
1889 ..	586,445	-27,450*	128,063	714,508	39,290	675,218	12,340
1890 ..	637,397	50,952	110,939	748,336	33,404	714,932	39,714
1891 ..	668,794	31,397	125,318	794,112	29,093	764,019	49,087
1892 ..	673,315	4,521	125,453	798,768	28,169	770,599	6,580
1893 ..	691,548	18,233	117,444	808,992	24,288	784,704	14,105
1894 ..	719,546	27,998	112,961	832,507	25,449	807,058	22,354
1895 ..	726,654	7,108	108,198	834,852	26,151	808,701	1,643
1896 ..	792,851	66,197	101,756	894,607	27,974	866,633	57,932

* Decrease.

It will be seen from the above that there has been a steady increase in the output of coal from the mines in the colony, year after year, since records have been kept by the Mines Department —with the exception of 1889. The yearly increase in output is principally due to the growing demand for consumption within the colony. During a period of eighteen years the consumption of coal in New Zealand has increased to the extent of 534,188 tons per annum, showing that new industries are quickly springing up, requiring fuel for generating motive-power.

The total output from the mines last year was 792,851 tons, as against 726,654 tons for 1895, an increased output of 66,197 tons. The coal imported from other countries was 101,756 tons, against 108,198 tons in 1895, a decrease in the importation last year of 6,442 tons. The imports were 2,447 tons from the United Kingdom, 99,304 tons from New South Wales, and 5 tons from Victoria. The total export of coal was 86,280 tons, of which 79,524 tons were colonial produce, and 6,756 tons imported coal from

other countries. Of the coal exported, 58,306 tons were for coaling direct steamers trading between the colony and the United Kingdom, and has been treated as coal consumed within the colony, these steamers trading wholly between New Zealand and Great Britain. Taking, therefore, the output from the mines and the coal imported, there is a total of 894,607 tons, of which 27,974 tons were exported, leaving the consumption within the colony last year 866,633 tons, as against 808,701 tons for 1895, an increased consumption of 57,932 tons.

The largest increase in the output last year was in the Westport district—namely, 39,553 tons. There was also an increased production from the mines in the Otago District of 11,483 tons, from the mines in the Kawakawa and Hikurangi districts of 9,006 tons, from the Waikato mines of 6,341 tons, and from the Southland coalfields of 4,285 tons. Increased outputs from the mines in the Mokau (1,408 tons), Whangarei (234 tons), and Malvern (233 tons) districts are also shown; but there was a decline in other places, the largest falling off being in the Greymouth and West Wanganui districts—4,774 tons and 1,111 tons respectively.

The quantities of coal produced in each district are as under:—

Name of District.	Output of Coal.		Increase or Decrease.	Approximate total Output of Coal up to the 31st December, 1896.
	1896.	1895.		
	Tons.	Tons.	Tons.	Tons.
Kawakawa and Hikurangi. ..	53,586	44,580	+ 9,006	920,738
Whangarei, Kamo, Ngunguru, and Whauwhau	21,106	20,872	+ 234	357,768
Waikato	61,899	55,558*	+ 6,341	884,732
Mokau	1,943	535	+ 1,408	10,505
Pelorus	..	..	..	711
West Wanganui	504	1,615	− 1,111	48,858
Westport	262,696	223,143†	+39,553	2,344,432
Reefton	3,795	4,018	− 223	67,807
Greymouth	137,890	142,664	− 4,774	2,267,252
Malvern	11,714	11,481	+ 233	327,975
Timaru	103	341	− 238	10,657
Otago	193,814	182,331	+11,483	3,112,005
Southland	43,801	39,516	+ 4,285	382,460
Totals	792,851	726,654	+66,197 (Net)	10,735,900

* 14,193 tons error (1895), deducted from figures published last year.
† 20 tons omitted (1895), now added to figures published last year.

The following table, constructed from "Laboratory Reports of the Geological Survey" (Sir J. Hector) gives the composition of samples of New Zealand coals freshly taken from the principal mines:—

Number.	Description.	Locality.	Analysis.				Evaporative Power.*	
			Fixed Carbon.	Hydrocarbon.	Water.	Ash.	1.	2.
1	Anthracite ..	Acheron, Canterbury ..	84·12	1·96	1·80	12·12	10·93	18·50
2	Bituminous ..	Coalbrookdale ..	74·83	20·50	1·16	3·51	9·70	16·45
3	" ..	"	70·00	22·15	2·52	5·33	9·10	15·40
4	" ..	Banbury	69·97	25·71	0·99	3·33	9·09	15·38
5	Altered brown coal	Malvern Hills ..	68·54	19·89	4·15	7·42	8·27	12·50
6	Bituminous ..	Tyneside	65·59	29·18	0·82	4·41	8·52	13·55
7	Glance coal ..	Rakaia Gorge ..	64·51	21·27	6·76	7·46	8 30	13·20
8	Bituminous ..	Wallsend	62·87	31·64	1·66	3·83	8·17	13·82
9	" ..	Grey River	62·37	29·44	1·99	6·20	8·01	13·22
10	Pitch coal ..	Kawakawa	61·16	28·00	2·51	8·33	7·95	12·55
11	Bituminous ..	Preservation Inlet ..	60·88	28·60	4·33	6·19	7·91	12·80
12	Pitch coal ..	Blackball, Grey River	60·20	29·97	8·01	1·82	7·82	12·20
13	Bituminous ..	Mokihinui	59·75	32·14	3·97	4·14	7·76	11·80
14	" ..	Coalpit Heath ..	58·81	38·98	1·02	1·19	7·64	12·96
15	" ..	Mokihinui	57·92	34·94	3·96	3·18	7·50	12·75
16	" ..	Brunner Mine ..	56·62	35·68	1·59	6·11	7·36	12·46
17	" ..	" ..	56·21	37·73	1·50	4·56	7·30	12·36
18	" ..	Westport	56·01	37·17	2·60	4·22	7·28	12·30
19	" ..	Mokihinui	55·59	38·86	3·16	2·39	7·20	12·22
20	" ..	Brunner	54·16	35·85	2·50	7·49	7·04	11·91
21	Altered brown coal	Malvern Hills ..	53·29	32·04	12·65	2·02	6·92	11·50
22	Bituminous ..	Wallsend	53·10	35·47	1·41	10·02	6·90	11·68
23	" ..	Otamataura Creek ..	52·89	36·63	2·19	8·29	6·90	11·70
24	" ..	Near Cape Farewell ..	51·37	38·72	4·38	5·53	6·31	11·60
25	Pitch coal ..	Kawakawa	50·15	42·63	4·18	3·04	6·50	11·80
26	Glance coal ..	Whangarei	50·11	38·68	8·01	3·20	6·50	11·75
27	Pitch coal ..	Kamo	50 01	37·69	9·61	2·69	6·50	11·17
28	Brown coal ..	Malvern Hills ..	49·99	35·42	11·79	2·80	6·49	10·90
29	"	Fernhill	49·95	36·95	12·00	1·10	6·49	10·99
30	" ..	Allandale	47·31	34·26	12·41	6·02	6·15	10 96
31	" ..	Kaitangata	46·48	33·48	14·66	5·38	6·04	10·22
32	" ..	Shag Point	46·21	32·65	16·02	5·12	6·00	10·16
33	" ..	Homebush	44·92	36 00	15·83	3·25	5·83	9·87
34	Pitch coal ..	Hikurangi, Whangarei	44·50	47·00	5·99	2·51	5·78	9·79
35	Brown coal ..	Hokonui	44·28	38·22	16·50	1·00	5·75	9·77
36	" ..	Kaitangata	44·11	38·32	15·44	2·13	5·74	9·96
37	" ..	Nightcaps	43·62	33·68	18·33	4·37	5.67	9·59
38	Pitch coal ..	Shag Point	43·19	30·05	15·82	10·94	5·61	9·52
39	Brown coal ..	Springfield	42·68	33·66	18·65	5·01	5·55	9·38
40	" ..	Orepuki	42·64	36·26	14·44	6·66	5·54	9·38
41	" ..	Kaitangata	38·29	32·43	17·50	11·78	4·87	8·32
42	" ..	Shag Point	35·76	30 86	13·22	20·16	4·64	7·85
43	" ..	Allandale	34·72	41·43	18·99	4·86	4·51	7·63
44	Pitch coal ..	Grey River	34·72	56·48	6·20	2·60	4·51	7·63
		FOR COMPARISON.						
	Newcastle, N.S.W.	Best	58·33	34·17	1·83	5·67	7·50	12 82
	"	Worst	53·34	26·66	3·33	16·67	6·90	11·72

*The second column headed "Evaporative Power" is obtained by the use of a multiple computed from the results of Professor Liversedge's experiments upon the coals of New South Wales. The multiple used for the first column is the one which has long been generally used for computing the evaporative power of coals; but, to prevent any unfair and prejudicial comparison of our coals with those of New South Wales, the second column is given.

As regards the quality of the coal, it cannot be surpassed. The late Sir John Coode, in his presidential address to the Institute of Civil Engineers, London, stated: "The bituminous coal found on the west coast of the Middle Island is declared by engineers to be fully equal, if not superior, to the best description from any part of the world." The quantity of each class of coal produced in 1895 and 1896 was:—

Class of Coal.	Output of Coal.		Increase.	Approximate total Output of Coal up to the 31st December, 1896.
	1896.	1895.		
	Tons.	Tons.	Tons.	Tons.
Bituminous	473,637	429,981	43,656	5,641,685
Pitch	110,547	104,566	5,981	1,651,087
Brown	179,744	166,697*	13,047	3,098,234
Lignite	28,923	25,410	3,513	344,894
Totals	792,851	726,654	66,197	10,735,900

*Error in figures published last year now corrected.

It has been computed that to deliver coal at the pit-mouth costs in labour 6s. a ton. The number of men employed in all the coal-mines last year was 1,937, and the output of coal, 792,851 tons: the average earning per man would thus be £122 15s. 10d. per annum, or about £2 7s. 3d. per week.

Other Metals or Minerals.

Very little has been done in the colony to prospect and develop mines other than for gold and silver. The only exports last year of metalliferous products, excluding gold and silver, were 21 tons of antimony-ore, 65 tons of manganese-ore, and 37 tons of various other minerals, representing an aggregate value of £1,990.

Kauri-gum.

The quantity of kauri-gum exported last year was 7,126 tons, as against 7,425 tons for 1895. Although 299 tons less were exported in 1896, the value increased by £12,557. Last year's produce (£431,323) gave an average value of about £60 10s. 7d. per ton, while for 1895 the average was £56 8s. per ton.

SECTION XI.—EDUCATION.

THE replies given by householders to the inquiry on the census schedules for 1896 showed that in every 100 persons living (excluding Chinese), 80·60 per cent. could read and write, 2·89 could read only, and 16·51 were unable to read. The proportion per cent. unable to read fell from 23·72 in 1878 to 21·19 in 1886, and further to 16·51 in 1896. Of those who could read only, the proportion diminished from 6·76 in 1878 till in 1896 it stood at 2·89 per cent. The following shows the percentages at each census period :—

	Read and Write.			Read only.			Cannot read.		
	Persons.	M.	F.	Persons.	M.	F.	Persons.	M.	F.
1878 ..	69·52	72·11	66·33	6·76	5·91	7·80	23·72	21·98	25·87
1881 ..	71·32	73·31	68·94	5·63	5·01	6·39	23·05	21·68	24·67
1886 ..	74·01	75·40	72·41	4·80	4·36	5·31	21·19	20·24	22·28
1891 ..	77·27	77·97	76·48	3·97	3·74	4·24	18·76	18·29	19·28
1896 ..	80·60	81·06	80·09	2·89	2·71	3·08	16·51	16·23	16·83

Besides the improvement in the degree of education shown above, which is observed in respect of females as well as males, it will be noticed that whereas the difference in the percentage able to read and write is very considerably in favour of the male sex for the year 1878, the proportions approximate more closely at each successive census year, until in 1896 there are found to have been 80·09 per cent. of the female sex who could read and write, against 81·06 of males. Doubtless when the results of the next census are known, the education of the females, taking as a standard the knowledge of reading and writing, will be equal to that of the males. But with a system of free and compulsory education this would be expected in time, and the census results have no longer the degree of importance or interest they had years ago.

In considering the proportions of the population at different age-periods the improvement in education is even more clearly proved. It is found that in 1896, of persons at the age-period 10–15 years, 98·73 per cent. were able to read and write, while 0·65 per cent. could merely read, and 0·62 per cent. were unable to read. The proportion who could not read increased slowly with each succeeding quinquennial period of age until at 50–55 years it stood at 4·04 per cent. At 75–80 years the proportion was 7·05, and at 80 and upwards it advanced to 8·07. Similarly, the proportion of persons who could read only increased from 0·65 at 10–15 years to 3·66 at the period 50–55 years, and again to 9·74 at 80 and upwards. The better education of the people at the earlier ages is thus exhibited.

Further evidences of improved education will be found in the portion of this work relating to marriages, where it is shown that the proportion of persons in every 1,000 married who signed by mark has fallen very greatly since 1881. The figures for the sexes in the year 1881 were 32·04 males and 57·94 females, against 6·19 males and 7·02 females in 1896.

Schools.

It has been found impossible to collect the full statistics relating to schooling for the year 1896 in time for this work, and the figures for the previous year are accordingly given.

The number of schools, teachers, and scholars, as in December, 1895, is shown in the following summary:—

Description of Schools.	Number of Schools.	Teachers.	Scholars.
European.			
Public (Government) schools (scholars other than Maoris and half-castes)	1,464	3,386	127,962
Public (Government) schools (half-castes living among Europeans)			984
Colleges, grammar, and high schools (aided or endowed)	24	178	2,525
Private schools (excluding Maori scholars)	298	770	14,659
Industrial schools and orphanages	8	..	711
Native village schools, European children attending	..	..	391
Private Native boarding-schools, European children attending	..	..	32
School for deaf-mutes	1	5	46
Jubilee Institute for Blind	1	4	35
Totals—Europeans	1,796	4,343	147,345
Native.			
Native village schools supported by Government (excluding European children stated above)	69	127	2,284
Private Native boarding-schools (maintenance of scholars paid by Government)	4	10	77
Private Native boarding-schools (maintenance of scholars paid from endowments)			111
Private Native day-schools	3	5	75
Public (Government) schools, Maoris attending	..	..	807
Public (Government) schools, half-castes living as Maoris attending	..	..	103
Private schools for Europeans, Maoris attending	..	..	45
Totals—Natives	76	142	3,502

Thus at the end of 1895 there were 1,872 schools of all classes at which members of the European and Maori races were being educated. This was an increase of 54 on the number in 1894. The public primary schools numbered 1,464 in 1895, against 1,410 in 1894. The number of aided or endowed colleges, grammar, and high schools was 24, the same as in the previous year. The number of private schools from which returns were received by the Registrar-General was 298, a decrease of 4. There were also 8 industrial schools and orphanages, public and private, as well as a school for deaf-mutes subsidised by Government, and a school for the blind.

The number of schools established for the education of the Native or Maori race was 76, against 72 in 1894.

Education at the public schools is free (except that, at such as

are also district high schools, fees are charged for the teaching of the higher branches) and purely secular. The attendance of all children between the ages of 7 and 13 is compulsory, except when special exemptions are granted, or a child is being otherwise sufficiently educated.

The subjects of instruction at the primary schools are required by the Education Act to be the following: Reading, writing, arithmetic, English grammar and composition, geography, history, elementary science and drawing, object-lessons, vocal music, and (in the case of girls) sewing and needlework, and the principles of domestic economy. Provision must also be made for the instruction in military drill of all boys in these schools.

The number of boys and girls of European descent, including half-castes living among Europeans, on the rolls of attendance of the various schools in the last quarter of 1895 was 147,345, an increase on the corresponding number in 1894 of 2,410. Of these, 128,946 were attending the public schools, 2,525 the colleges, grammar, and high schools, 14,659 private schools, 711 were inmates of orphanages and industrial schools, 391 attended Native village schools, 46 were deaf-mutes at the Government institution, 35 were at the institute for the blind, and 32 attended Native village schools. There was an increase (exclusive of Maoris) during the year of 2,330 in the number attending public schools, and of 37 in the number attending private schools. The attendance at the colleges, grammar, and high schools, increased by 71, and the number of European children at Native village schools decreased by 7.

Exclusive of Maoris, but including 521 male and 463 female half-castes living among Europeans, there were 66,814 boys and 62,235 girls in attendance at the public primary schools during the last quarter of 1895, an increase on the numbers in 1894 of 1,372 boys and 1,061 girls.

There were 1,372 male and 2,014 female teachers (exclusive of 190 sewing-mistresses) at the public schools at the end of 1895. Of the males, 206, and of the females, 814, were pupil-teachers.

Of the secondary or superior schools, 24 in number, 8 were for boys only, 7 for girls only, and 9 for boys and girls. The number of regular instructors in 1895 was 130, and of visiting instructors 48. The number of pupils on the roll for the last term of 1895 was 2,525; of these, 1,421 were boys and 1,104 girls.

Technical Schools.

The subject of technical schools is shortly dealt with in a special article in Part III., *post*.

New Zealand University.

The New Zealand University is not a teaching body; undergraduates for the most part keep their terms at one or other of the following affiliated institutions: the Auckland University College, the Canterbury College, and the University of Otago, each of which has a staff of professors and lecturers. On the 1st June, 1896, the

number of graduates who had obtained direct degrees was 489. The number of undergraduates on the roll of the University at that date was 1,686 (exclusive of such as had not performed any academical act for a period of ten years), but only 764 were keeping terms, of whom 507 were males and 257 females. Seventy-one of the males and 15 of the females were medical students. The numbers of students attending lectures at the affiliated institutions during the year 1895–96 were as follow: At the Auckland University College, 57 matriculated and 152 non-matriculated; at Canterbury College, 177 matriculated and 130 non-matriculated; at the Otago University, 185 matriculated and 41 non-matriculated.

Private and Denominational Schools.

There were 298 private schools in the colony at the end of 1895, a decrease of 4 on the number in 1894; 33 were for boys, 47 for girls, and 218 for children of both sexes. The number of pupils attending them was 14,659—namely, 6,187 boys and 8,472 girls, not counting Maoris, 45 girls. The number of European pupils at these schools was greater than in 1894 by 32. Of the private schools 114 were Roman Catholic, with an attendance of 10,458 pupils.

The following gives, for the past ten years, the number of private schools and of Europeans attending them, the number of Roman Catholic schools and pupils being also shown separately:—

Year.	Number of Private Schools.	Pupils.			Included in Previous Numbers.	
		Boys.	Girls.	Totals.	Roman Catholic Schools.	Pupils at Roman Catholic Schools.
1886	288	5,216	7,257	12,473	83	7,991
1887	299	5,771	7,616	13,387	90	8,946
1888	299	5,874	7,979	13,853	96	9,346
1889	293	5,778	7,680	13,458	95	9,024
1890	298	5,759	7,867	13,626	108	9,474
1891	281	6,234	7,908	14,142	110	10,144
1892	274	6,321	8,135	14,456	105	10,111
1893	299	6,431	8,491	14,922	111	10,263
1894	302	6,117	8,510	14,627	117	9,953
1895	298	6,187	8,472	14,659	114	10,458

The total number of children of European descent (including such half-castes as live among Europeans) known to be receiving education at school at the end of 1895 was 147,345; of these, 139,252 were from 5 to 15 years of age. The census showed also 6,352 children receiving tuition at home in 1896, against 8,178 in 1891. No doubt increased school accommodation in country places does away with the need for tutors and governesses to a certain extent.

Attendance at Sunday schools has been already commented on under the heading of "Religion."

The distribution of the private schools in the various provincial districts of the colony is shown in the two following tables:—

PRIVATE SCHOOLS, 1895.—SUMMARY BY PROVINCIAL DISTRICTS.

Provincial Districts.	Number of Schools.				Number of Teachers.			Number of Scholars (exclusive of Maoris).			Daily Average Attendance.		
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	8	14	68	90	43	141	184	1,474	1,961	3,435	1,225	1,668	2,893
Taranaki	1	...	12	13	4	24	28	123	256	379	102	230	332
Hawke's Bay	4	5	8	17	10	30	40	421	473	894	390	432	822
Wellington...	6	7	31	44	48	100	148	1,129	1,609	2,738	1,001	1,400	2,401
Marlborough	1	2	5	8	3	10	13	121	189	310	88	168	256
Nelson	3	5	11	19	8	33	41	337	412	749	278	356	634
Westland	1	...	8	9	3	21	24	276	328	604	227	270	497
Canterbury	5	8	43	56	19	155	174	1,349	1,850	3,199	1,096	1,603	2,699
Otago	4	6	32	42	14	104	118	957	1,394	2,351	803	1,227	2,030
Totals	33	47	218	298	152	618	770	6,187	8,472	14,659*	5,210	7,354	12,564

* Exclusive of Maoris, 45 girls.

NOTE.—Denominational schools, such as Roman Catholic and Anglican, are included in the above as private schools. Particulars for the Roman Catholic schools in December, 1895, are as under.

SUMMARY OF ROMAN CATHOLIC SCHOOLS.

Provincial Districts.	Number of Schools.				Number of Teachers.			Number of Scholars.			Daily Average Attendance.		
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	4	6	18	28	12	56	68	734	1,095	1,829	551	886	1,437
Taranaki	...	...	4	4	1	12	13	74	148	222	60	132	192
Hawke's Bay	1	2	3	6	3	17	20	263	335	598	235	305	540
Wellington	3	5	8	16	22	50	72	707	1,137	1,844	620	977	1,597
Marlborough	1	1	2	4	2	4	6	114	152	266	82	136	218
Nelson	2	4	3	9	...	22	22	198	295	493	156	251	407
Westland	1	...	6	7	3	19	22	259	313	572	214	262	476
Canterbury	3	3	14	20	4	77	81	1,264	1,516	2,780	1,024	1,304	2,328
Otago	3	3	14	20	11	57	68	788	1,066	1,854	669	936	1,605
Totals	18	24	72	114	58	314	372	4,401	6,057	10,458	3,611	5,189	8,800

Schools for Natives.

The number of Native village schools at the end of 1895 either supported or subsidised by the Government was 69 — four more than in 1894. In addition, there were four boarding-schools for Native children, the cost of whose maintenance was paid either by the Government or from endowments, and three private Native schools.

The number of Maori children attending schools at the end of 1895 was 3,502—namely, 1,998 males and 1,504 females. These included 240 half-castes at the Native village schools who were living as members of Maori tribes, and 103 at public European schools.

The numbers at the several schools in 1894 and 1895 were as follow:—

Schools.	Maori Children attending Schools.					
	Boys.		Girls.		Total of both Sexes.	
	1895.	1894.	1895.	1894.	1895.	1894.
At public European schools ..	551	438	359	246	910	684
At Native village schools ..	1,290	1,140	994	880	2,284	2,020
At subsidised or endowed boarding-schools	108	92	80	81	188	173
At private European or Native schools	49	72	71	44	120	116
Totals	1,998	1,742	1,504	1,251	3,502	2,993

There was thus in 1895 an increase of 256 in the number of Maori boys and an increase of 253 in the number of Maori girls attending school.

The number of headmasters at Native village schools at the end of the year 1895 was 57; of head-mistresses, 10; of assistants, 60; and of sewing-mistresses, 13. The salaries of head-teachers ranged from £94 to £210, and those of assistants and sewing-mistresses from £50 to such very small allowances as £7. The expenditure in 1895 was £17,837 3s. 7d., made up as follows: Teachers' salaries and allowances, £10,704 4s. 1d.; boarding-school allowances (including scholarships) and apprenticeship, £1,790 0s. 1d.; buildings, fencing, furniture, &c., £3,077 10s. 10d.; repairs and small works, £736 12s. 5d.; books and school requisites, £504 5s. 4d.; inspection (including travelling), £768 8s. 3d.; cost of lantern-lectures, £203 7s. 5d.; sundries, £52 17s. 2d.

As to the use of the magic-lantern, the Inspector remarks:—

The exhibitions given have been of very marked utility. In the first place, they have in nearly every case greatly interested the older Maoris, and have made them acquainted with much that they had not previously known or suspected about Europeans — their unbounded activity, and the superiority of their mode of living. Then, the exhibitions have tended to bring the children into much closer contact with actual fact than is ever attainable by mere school instruction consisting of verbal statement and explanation—

to bring them nearer to reality—and to let them actually see for themselves that their schoolroom and its appliances, superior as they are to Maori buildings, do not at all reach the higher limit of what can be done by the pakeha's wealth and power and skill and enterprise. In many cases the Maoris appear to have felt that this kind of provision for their instruction and amusement is a very palpable pledge of disinterested good-will towards them on the part of the Government. There is great reason to hope that the permanent arrangements now being made for the periodical use of the magic lantern in our Native schools will be productive of immense benefit.

Income and Expenditure of Education Boards.

The total income of the various Education Boards for the year 1895 was £467,943 5s. 9d. The grants by Government amounted to £424,213 18s. 2d., an increase of £16,746 1s. 8d. on the grants in 1894. These grants consist of (1) a statutory allowance of £3 15s. per child in daily average attendance, (2) a further capitation allowance of 1s. 6d. for scholarships, and (3) a varying sum for school-buildings. The income from reserves amounted to £39,828 11s. 1d.

The total expenditure in 1895 amounted to £457,099 18s. 2d., of which the sum of £382,506 5s. 2d. was laid out on the maintenance of the schools, £11,481 19s. 3d. used to meet expenses of the Boards, £13,127 5s. 10d. spent on inspection of schools and examination of pupil-teachers, £45,251 0s. 2d. on school-buildings, and £4,733 7s. 9d. on miscellaneous services.

Cost of Industrial Schools.

The net expenditure on Government industrial schools for 1895 exceeded the corresponding amount for 1894 by about £9. The gross cost to Government was £14,017 17s. 6d.; the net cost, £7,169 1s. 6d.

COST OF GOVERNMENT INDUSTRIAL SCHOOLS, 1895.

School.	Gross Cost of School.	Cost of Boarding out (Included in preceding Column).	Recoveries.	Net Cost.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland	1,282 1 7	648 5 2	337 13 9	944 7 10
Burnham	6,002 5 6	2,631 10 8	2,282 8 2	3,719 17 4
Caversham ..	6,359 14 8	3,257 12 10	4,228 14 1	2,131 0 7
Salary and expenses of Visiting Officer ..	..	..	..	373 15 9
Totals ..	13,644 1 9	6,537 8 8	6,848 16 0	7,169 1 6

The average number of inmates of all grades belonging to these schools was 1,100. The gross cost of the maintenance of each was £12 15s., and the net cost £6 10s. But the average number of inmates maintained was 634; and if the salaries are regarded as a fair equivalent for the work involved in the supervision of the inmates at service, with friends, &c., the gross cost per head for the 634 is £22 2s. 2d.

The Government expenditure on the private industrial schools is next shown. The net expenditure is £189 less than the corresponding amount for the preceding year.

GOVERNMENT EXPENDITURE ON PRIVATE INDUSTRIAL SCHOOLS, 1895.

School.	Payments.			Recoveries.			Net Expenditure by Government.		
	£	s.	d.	£	s.	d.	£	s.	d.
St. Mary's, Ponsonby (Auckland)	485	3	0	18	13	0	466	10	0
St. Joseph's, Wellington ..	372	3	0	78	9	6	293	13	6
St. Mary's, Nelson	2,211	17	6	323	5	4	1,888	12	2
Totals	3,069	3	6	420	7	10	2,648	15	8

The total number of inmates of the two kinds of industrial schools is given for the years 1894 and 1895, and the variations in the numbers boarded out, in residence, or at service :—

INMATES, 1894 AND 1895.

—	Boarded out.				In Residence.				At Service, &c.				Totals.			
	Dec., 1894.	Increase.	Decrease.	Dec., 1895.	Dec., 1894.	Increase.	Decrease.	Dec., 1895.	Dec., 1894.	Increase.	Decrease.	Dec., 1895.	Dec., 1894.	Increase.	Decrease.	Dec., 1895.
Government Schools—																
Auckland	43	..	4	39	13	..	3	10	49	..	6	43	105	..	13	92
Burnham	170	..	6	164	111	..	4	107	263	6	..	269	544	..	4	540
Caversham	181	21	..	202	103	..	17	86	174	..	..	174	458	4	..	462
Private Schools—																
St. Mary's, Auckland	..	..	..	..	45	1	..	46	11	3	..	14	56	4	..	60
St. Joseph's, Wellington	4	..	..	4	58	6	..	64	8	..	..	8	70	6	..	76
St. Mary's, Nelson ..	4	3	..	7	263	..	16	247	55	6	..	61	322	..	7	315
Totals ..	402	24	10	416	593	7	40	560	560	15	6	569	1,555	14	24	1,545

Deaf, Dumb, and Blind Institutions.

The children at the deaf-and-dumb institution at Sumner, near Christchurch, were 46 in December, 1895. The institution is under Government control. The expenditure for the year 1895 was £3,025 11s. 3d., made up as follows: Salaries of professional staff, £1,117 0s. 4d.; salaries and wages of domestic staff, £472 12s. 1d.; rent, £470; housekeeping, £669 10s. 7d.; travelling, £100 6s. 5d.; school material and appliances for technical instruction, £11 9s. 10d.; repairs, £50 9s. 9d.; sundries, £66 15s. 2d.; clothing, £16 13s. 9d.; medicine, £13 19s. 4d.; drainage, £36 14s. Contributions received from parents amounted to £180 4s. 8d., making the net cost £2,845 6s. 7d. The children are taught to speak with the mouth, and to read articulate speech by observing the movement of the lips. The census of 1896 showed a total number of 115 deaf-and-dumb persons under 20 years of age residing in the colony, so that

more than one-third of the full number would appear to be living at the institution.

The blind pupils formerly sent to Melbourne or Sydney are now provided for in the Jubilee Institution for the Blind at Auckland. The number at the end of the year was 23. In cases where necessity has been shown, the Education Department pays at the rate of £25 a year for each pupil, recovering what is possible from parents. The payments amounted to £560 17s. 2d., of which sum £51 4s. was recovered from parents. The number of blind persons under 20 years of age returned at the census of 1896 as living in the colony was 57.

Public Libraries, and other Literary and Scientific Institutions.

Although the number of these institutions only increased from 298 to 304 between the years 1891 and 1896, according to the census returns, it will be found that the membership increased from 14,489 to 17,638, or at the rate of 21·73 per cent. There was also a large increase of books (23·83 per cent.), which numbered 330,770 in 1891, and 409,604, in 1896. In considering these facts it must be borne in mind that the population increased 12·24 per cent. in the quinquennium. The details for all provincial districts are given, which shows that Auckland and Otago had 75 institutes each, and Canterbury 73. In membership Otago stands highest, and Auckland second; but according to number of books Auckland takes first place, Canterbury next, and Otago third.

Provincial Districts.	Number of Institutions.	Number of Members.	Number of Books.
Auckland	75	3,741	106,577
Taranaki	6	378	7,700
Hawke's Bay	17	1,513	22,955
Wellington	21	3,029	49,712
Marlborough	5	234	7,783
Nelson	25	679	27,363
Westland	7	355	6,602
Canterbury	73	3,647	93,981
Otago	75	4,062	86,931
Totals, 1896	304	17,638	409,604
Totals, 1891	298	14,489	330,770
Totals, 1886	303	13,684	292,108
Totals, 1881	225	12,868	198,520
Totals, 1878	187	12,092	173,021

Places of Worship.

The total number of buildings returned as used for public worship in 1896 was 1,987, of which 1,431 were churches or chapels. These last increased by 234, or 19 per cent. on the number returned in 1891. The schoolhouses used for worship in 1896 and 1891 were 366 and 241 for the respective years; 190 dwelling-

houses were used as churches or chapels at last census. Sitting accommodation was found for 334,509 persons in all buildings utilised for public worship; and the numbers attending services amounted in the aggregate to 209,731. These numbers show increase at the rate of 20·28 and 18·46 per cent. respectively since 1891, while the increase of population during the interval between the two censuses was at the rate of 12·24 per cent.

The following gives the buildings in use for purposes of public worship by the various denominations. The number of persons belonging to each denomination in the colony is previously stated under the head of "Religion."

Denominations.	Churches and Chapels.	School-houses used for Public Worship.	Dwellings or Public Buildings used for Public Worship.	Number of Persons.	
				For whom Accommodation.	Attending Services.
Church of England ..	414	105	33	76,811	48,117
Roman Catholics ..	212	8	7	52,267	36,080
Catholic Apostolic Church	1	..	..	100	50
Presbyterians	301	152	45	75,881	48,751
Methodists—					
Wesleyan Methodists*	249	60	27	55,772	35,445
Independent Wesleyans	1	1	..	259	180
Primitive Methodists ..	45	9	4	9,325	5,436
Scandinavian Methodists	1	..	..	80	50
Other Denominations—					
Baptists	34	1	1	8,630	5,652
Congregational Independents	20	5	1	6,700	3,475
Lutherans	15	1	..	1,510	806
Society of Friends ..	1	..	..	60	25
Brethren	27	..	9	5,309	2,049
Christian Disciples ..	2	..	1	262	222
Church of Christ ..	15	1	5	4,765	2,738
Christadelphians ..	3	..	4	395	138
New Church (Swedenborgian)	1	..	..	100	40
Seventh-day Adventists	5	..	..	700	254
Students of Truth ..	1	..	..	1,200	500
New and Latter House of Israel	1	..	..	50	13
Salvation Army ..	61	10	30	24,178	15,777
Undenominational ..	15	13	23	9,265	3,503
Hebrews	5	..	..	810	380
Confucians	1	..	..	80	50
Buildings open to more than one denomination (included in the above)	[15]	[22]	[9]	[3,855]	[2,062]
Totals, 1896 ..	1,431	366	190	334,509	209,731
Totals, 1891 ..	1,197	241	161	278,114	177,055

* Includes United Free Methodists and Bible Christians, which bodies amalgamated with the Wesleyan Methodist Church on 13th April, 1896.

The number of buildings, in each provincial district of the colony, used for public worship is shown in the next table :—

Provincial Districts.	Churches and Chapels.	School-houses used for Public Worship.	Dwellings or Public Buildings used for Public Worship.	Number of Persons.	
				For whom Accommodation.	Attending Services.
Auckland	329	98	61	78,104	45,270
Taranaki	62	5	16	13,173	7,378
Hawke's Bay	83	20	13	17,526	11,485
Wellington	209	22	26	49,320	31,973
Marlborough	28	1	2	4,809	3,361
Nelson	93	34	11	17,963	10,521
Westland	42	3	2	7,955	5,001
Canterbury	277	61	15	62,884	42,615
Otago	308	122	44	82,775	52,127
Totals, 1896 ..	1,431	366	190	334,509	209,731
Totals, 1891 ..	1,197	241	161	278,114	177,055

SECTION XII.—LAW AND CRIME.

Civil Cases.

Sittings of the Supreme Court are held for trial of civil cases at Auckland, Gisborne, New Plymouth, Napier, Wellington, and Wanganui, in the North Island; and at Blenheim, Nelson, Hokitika, Christchurch, Timaru, Oamaru, Dunedin, and Invercargill, in the Middle Island.

The number of writs of summons issued in the Supreme Court in 1895 was 511, against 664 in 1894, and 741 in 1893. The number of civil cases tried decreased from 132 in 1894 to 129 in 1895. Of these, 21 were tried before common juries, 27 by special jury, and 81 by Judge without jury. The total of amounts for which judgments were recorded in 1895 was £86,740. There were 47 writs of execution issued during the year.

Sixty-three cases were commenced at sixteen District Courts in 1895. Seven of these cases were tried before juries, and 29 before a Judge only, making a total of 36 cases tried. Twenty-five cases lapsed or were discontinued, and 2 remained pending. The total of amounts sued for was £10,284, and judgments were recorded for £2,136. Before the Magistrates' Courts 25,201 cases were tried, against 24,890 in 1894; the aggregate sum sued for being £325,980, and the total for which judgment was given £185,919.

Three Crown (criminal) cases were reserved from the Superior Courts and brought before the Court of Appeal in 1895. The convictions were affirmed. There were appeals from 11 civil cases, of which 5 were allowed and 4 dismissed. Judgments were given on 4 other cases removed to the Court of Appeal.

Bankruptcy.

The petitions in bankruptcy during 1895 numbered 485, of which 440 were made by debtors and 45 by creditors. This number is 141 fewer than the petitions for the preceding year.

Of the bankruptcies in 1895, in 14 cases the liabilities were under £50; in 92, from £50 to £100; in 178, from £100 to £250; in 100, from £250 to £500; in 61, from £500 to £1,000; in 19, from £1,000 to £2,000; in 10, from £2,000 to £5,000; and in 8, £5,000 and upwards.

The following gives the number of petitions, the total amount of the unsecured assets, the amount of debts proved, and the amount paid in dividends and preferential claims for the past ten years:—

Year.	No. of Petitions in Bankruptcy.	Debtors' Statements of Assets, excluding Amounts secured to Creditors.	Amounts realised by Official Assignees.	Amount of Debts proved.	Amounts paid in Dividends and Preferential Claims.
		£	£	£	£
1886 ..	1,089	415,953	128,370	566,291	102,966
1887 ..	1,036	311,745	135,633	503,759	109,255
1888 ..	881	252,322	98,213	571,741	79,843
1889 ..	724	441,874	187,048	755,165	95,032
1890 ..	652	262,733	112,951	381,124	122,276
1891 ..	605	141,970	84,341	302,712	72,571
1892 ..	507	192,049	66,497	238,953	43,661
1893 ..	484	111,483	68,843	464,273	37,721
1894 ..	626	187,785	85,538	310,077	70,888
1895 ..	485	133,603	88,684	239,562	70,018

A special article on the present bankruptcy law of New Zealand was printed in the Year-book of 1894. Reference is made in it to a mode of private assignment which has come into such frequent use as to prevent conclusions being drawn from a comparison of the figures above given.

Divorce.

The petitions in 1895 under "The Divorce and Matrimonial Causes Act, 1867," were 36 in number—7 more than in 1894: 30 were for dissolution of marriage, and 6 for judicial separation; 18 decrees for dissolution of marriage were granted. The proceedings under the Act for the past nine years were as follows:—

Year.	Petitions for		Decrees for	
	Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.
1887	26	6	16	1
1888	35	3	32	..
1889	26	7	17	1
1890	24	8	21	3
1891	31	5	20	3
1892	30	8	18	1
1893	34	9	25	1
1894	26	3	20	4
1895	30	6	18	5

The petitions for dissolution of marriage amounted on the average for the nine years to 7·50 in every 1,000 marriages, and the decrees for dissolution to 5·43.

The proportion of petitions and decrees for dissolution of marriage to the number of marriages is higher in New Zealand than in England and Wales, but lower than in New South Wales or

Victoria. The proportion in every 1,000 marriages for these countries is as follows:—

Country.	Petitions for Dissolution of Marriage.	Decrees for Dissolution of Marriage.
New Zealand (1895)	7·50	5·43
England and Wales	1·88	0·95
New South Wales (1895) ..	43·34	28·52
Victoria (1895)	18·74	11·84

In 1889 an Act was passed in Victoria to allow of divorces being granted for wilful desertion, habitual drunkenness with cruelty or neglect, imprisonment under certain circumstances of either party, and adultery on the part of the husband. This multiplication of the causes for divorce has largely increased the proportion of decrees in that colony.

An Act of a similar tenor was passed in New South Wales in 1891, and brought into working in August of the following year, with the result that the number of decrees (*nisi*) of divorce made absolute increased from 68 in the year 1891 to 229 in 1895.

Criminal Cases.

In respect of criminal statistics New Zealand compares favourably with the colonies of Australia, as will be seen on reference to the following figures, taken from the Victorian Year-book for 1894:—

1892.	Proportion per 1,000 of Population of		Proportion per 10,000 of Population of	
	Apprehensions and Summonses.*	Summary Convictions.	Commitments.	Convictions after Commitment.
Queensland	42·17	32·74	10·82	4·88
New South Wales ..	65·82	47·77	11·95	7·59
Victoria	48·72	33·26	9·82	6·53
South Australia ..	23·79	20·17	5·74	2·72
Western Australia ..	99·57	63·90	16·61	10·36
Tasmania	41·07	31·54	7·00	2·81
New Zealand (exclusive of Maoris)	27·39	20·69	5·40	2·80

* Not including civil cases.

Judging by the number of summary convictions in 1892, the amount of crime in New Zealand appears to have been at that time proportionately less than in any one of the Australian Colonies excepting South Australia. The ratio of convictions after commitment was somewhat higher than in South Australia, but lower than in any other colony.

Charges before Magistrates.

The number of charges heard before the Magistrates' Courts in 1895 was 18,028. Repeated charges against the same person are

counted as distinct. In 1894 the number was 17,805; in 1893, 18,271; in 1892, 18,017; in 1891, 17,613; in 1890, 18,701; in 1889, 18,845; and in 1888, 19,167. Of the charges in 1895, 447 were against persons of the aboriginal native race, a decrease of 5 on the number for the previous year.

If the Maoris be excluded, the number of charges in 1895 is found to be 17,581, an increase of 228 upon the number for 1894; and the proportion per 1,000 of population is 25·39, against 25·55 for 1894.

The figures, both numerical and proportional, for a series of fourteen years are subjoined:—

CHARGES BEFORE MAGISTRATES.

Year.	Number.	Proportion per 1,000 of Population.	Year.	Number.	Proportion per 1,000 of Population
1882	22,108	43·41	1889	18,476	30·10
1883	22,511	42·52	1890	18,247	29·39
1884	23,105	41·81	1891	17,189	27·29
1885	22,709	39·61	1892	17,587	27·38
1886	21,227	36·46	1893	17,932	27·12
1887	19,924	33·41	1894	17,353	25·55
1888	18,829	30·82	1895	17,581	25·39

The general results shown in the next table are borne out in a most satisfactory manner by the statistics relating to prisoners in gaol (see *post*), which also show a marked decrease in crime during the last fifteen years.

Summary Convictions, and Convictions in Superior Courts.

The summary convictions in 1895 numbered 13,383, including 316 Maoris. 647 persons were committed for trial at the Supreme and District Courts, an increase of 5 on the number committed in 1894.

"The Justices of the Peace Act, 1882," provides that sundry indictable offences may with the consent of the accused be summarily dealt with by Magistrates. The increasing use of this provision may have affected the number of convictions in the higher Courts shown in the eight-year table on next page.

Including 15 Maoris, the convictions in the superior Courts numbered 359 (persons).

A comparison of the number of persons in New Zealand summarily convicted during eight years, ending with 1895, shows a decrease in the proportion of these convictions per 1,000 of the population, not only on the total but also in regard to offences against the person, against property, and other offences taken separately. Dealing with the convictions in the superior Courts for offences against the person and property, the number and proportion per 1,000 of population are both higher for 1895 than for any of the preceding seven years; but in regard to "other offences," the proportion is less in 1895 than in 1894 or 1888. The figures given exclude the Maoris:—

Years.	Summary Convictions. Number.	Summary Convictions. Proportion per 1,000 of Mean Population.	Convictions in Superior Courts. Number.	Convictions in Superior Courts. Proportion per 1,000 of Mean Population.
1888.				
Offences against the person ..	715	1·18	42	0·07
Offences against property ..	1,246	2·06	178	0·29
Other offences	12,298	20·31	35	0·06
Totals	14,259	23·55	255	0·42
1889.				
Offences against the person ..	716	1·17	30	0·05
Offences against property ..	1,377	2·24	152	0·25
Other offences	11,768	19·16	43	0·07
Totals	13,861	22·57	225	0·37
1890.				
Offences against the person ..	794	1·28	18	0·03
Offences against property ..	1,273	2·05	138	0·22
Other offences	11,818	19·04	36	0·06
Totals	13,885	22·37	192	0·31
1891.				
Offences against the person ..	751	1·19	31	0·05
Offences against property ..	1,312	2·08	141	0·23
Other offences	10,988	17·45	42	0·07
Totals	13,051	20·72	214	0·35
1892.				
Offences against the person ..	771	1·20	29	0·05
Offences against property ..	1,294	2·01	127	0·20
Other offences	11,225	17·48	24	0·04
Totals	13,290	20·69	180	0·29
1893.				
Offences against the person ..	760	1·15	48	0·07
Offences against property ..	1,361	2·06	174	0·26
Other offences	11,336	17·14	38	0·06
Totals	13,457	20·35	260	0·39
1894.				
Offences against the person ..	724	1·07	36	0·05
Offences against property ..	1,284	1·89	199	0·29
Other offences	10,605	15·61	65	0·10
Totals	12,613	18·57	300	0·44
1895.				
Offences against the person ..	673	0·97	56	0·08
Offences against property ..	1,383	2 00	255	0·37
Other offences	11,011	15·90	33	0·05
Totals	13,067	18·87	344	0·50

The number of summary convictions in the various Magistrates' Courts for certain of the most common offences in each of the past

eight years, together with the proportion per 1,000 of the mean population (excluding Maoris) is given herewith:—

SUMMARY CONVICTIONS.

Numbers.

	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Assaults ..	633	636	705	675	656	670	647	581
Theft* ..	971	1,085	905	934	904	978	921	1,034
Drunkenness	5,402	5,152	5,677	5,118	5,055	5,048	4,493	4,568

Proportions per 1,000 of the Population.

	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Assaults ..	1·05	1·04	1·14	1·07	1·02	1·01	0·95	0·84
Theft* ..	1·60	1·77	1·45	1·48	1·41	1·48	1·36	1·49
Drunkenness	8·92	8·39	9·14	8·13	7·87	7·63	6·62	6·60

The proportion of assaults for 1895 is found to be less than for any one of the previous seven years. In the year 1887 it was as high as 1·23 per 1,000. During the years 1890–95 the proportion for theft remained almost without change. The record of drunkenness shows a falling rate for the same six years. It would seem that the rates given for 1888–89 are incorrect, as they were worked upon an estimate of population which the census of 1891 proves to have been exaggerated. Could the true figures be ascertained they might possibly show a steady decline throughout the period under review. The range for ten years is from 10·28 per 1,000 persons in 1886 to 6·60 in 1895.

Drunkenness.

To judge by the consumption of beer, wine, and spirits in the period 1884–1895, there has been a very considerable falling-off during the last twelve years in the use of alcoholic liquors in this colony. Exclusive of Maoris, the beer consumed was 8·769 gallons per head in 1884, against 7·421 in 1895, or 1¼ gallon less. Wine in 1884 was 0·272 gallons per head, against 0·135 in 1895; and spirits fell from 0·999 gallons to 0·629 in the same period. The figures, including and excluding Maoris, are given for each of the last ten years.

CONSUMPTION OF BEER, WINE, AND SPIRITS PER HEAD OF POPULATION (INCLUDING AND EXCLUDING MAORIS).

	Including Maoris.			Excluding Maoris.		
	Beer. Gal.	Wine. Gal.	Spirits. Gal.	Beer. Gal.	Wine. Gal.	Spirits. Gal.
1886..	7·333	0·198	0·765	7·861	0·212	0 820
1887..	7·148	0·185	0·719	7·651	0 198	0·770
1888..	6·670	0·156	0·767	7·133	0·167	0·820
1889..	7·136	0·165	0·560	7·624	0·176	0·598
1890..	7·402	0·172	0·649	7·899	0·184	0·693
1891..	7·168	0·161	0·655	7·646	0·172	0·699
1892..	7·328	0·163	0·664	7·807	0·174	0·708
1893..	7·255	0·159	0·656	7·716	0·170	0·697
1894..	6·961	0·136	0·611	7·391	0·144	0·648
1895..	6·996	0·127	0·593	7·421	0·135	0·629

* Including embezzlement, receiving, and alse pretences.

The actual quantities of beer, wine, and spirits used in the colony range from 4,576,291 gallons of beer in 1886 to 5,138,170 gallons in 1895. Wine shows a decrease from 123,376 gallons in 1886 to 93,138 gallons in 1895; and spirits a decrease from 477,352 gallons in 1886 to 435,431 gallons in 1895. The mean population increased during the decennium from 582,117 to 692,417 persons, or at the rate of 18·95 per cent.

At the same time a comparison of the convictions for drunkenness shows that excessive drinking was not so prevalent in 1895 as it was ten years previously. And among the New-Zealand-born population of European descent there is evidence of less drunkenness than among persons who have come to the colony from abroad. At the census of 1896, out of the total population of New Zealand over 15 years of age, not less than 43·71 per cent. were found to have been born here. The proportion would have been about the same in the year 1895, when it was found that the proportion of the convictions for drunkenness of New-Zealand-born Europeans to the total convictions was only 9 per cent.

The prison statistics show for several years back the number of distinct prisoners received into gaol after being convicted of drunkenness. The figures for the years 1885–95 are as follow (readmissions of the same person not counted) :—

DISTINCT PRISONERS CONVICTED OF DRUNKENNESS RECEIVED INTO GAOL.

Year.	Number.	Year.	Number.
1885	1,200	1891	694
1886	1,077	1892	638
1887	1,038	1893	619
1888	938	1894	457
1889	802	1895	469
1890	808		

Here the decrease proceeds rapidly and almost uniformly from year to year. It is true that the option of a fine is generally given to a person convicted of drunkenness, but there is nothing to show that the proportion of fines for this offence has increased of late, so that a fall in the number of distinct persons imprisoned may fairly be accepted as evidence of growing sobriety among the people.

In New South Wales and Victoria the consumption per head of alcoholic liquors is much greater than it is here. The figures are,—

	Beer. Gal.	Wine. Gal.	Spirits. Gal.
Victoria	19·36	1·01	1·12
New South Wales	10·91	0·86	1·00

In each of these colonies, as also in Queensland and South Australia, arrests for drunkenness are, in proportion to population, far more numerous than in New Zealand. The order of the colonies in this respect is as under :—

ARRESTS, ETC., FOR DRUNKENNESS IN PROPORTION TO POPULATION.

New South Wales	17·50 per 1,000
Victoria	13·67 "
Queensland	11·82 "
New Zealand	8·16 "
South Australia	8·15 "
Tasmania	6·92 "

Crime amongst Maoris.

The Native population of the colony may be regarded as stationary, and a comparison of the numbers of summary convictions by the higher and lower Courts for the last twelve years seems to lead to the conclusion that crime amongst the Maoris is not increasing. The figures, especially those relating to the convictions by the superior Courts, though small and fluctuating, are considered sufficient to justify this inference:—

SUMMARY CONVICTIONS OF MAORIS.

Year.	Number.	Year.	Number.
1884	296	1890	243
1885	238	1891	298
1886	277	1892	293
1887	279	1893	253
1888	213	1894	321
1889	221	1895	316

CONVICTIONS OF MAORIS IN SUPERIOR COURTS.

Year.	Convictions.	Number of Persons convicted
1884	27	22
1885	15	13
1886	22	27
1887	11	13
1888	10	10
1889	10	10
1890	31	35
1891	7	7
1892	16	15
1893	13	12
1894	25	24
1895	17	15

Prisoners in Gaol.

The total number of prisoners received in the different gaols of the colony during the year 1895 was 3,489, including persons awaiting trial but not convicted within the year, and counting as distinct persons repeated admissions of the same person, as well as transfers from gaol to gaol of convicts undergoing sentence. In 1894 the number received was 3,561, so that the figures for 1895 show a decrease of 72. Of 3,489 admissions for 1895, 64 were for debt, and 63 on account of lunacy; while 123 were Maoris imprisoned for various offences. If the debtors, lunatics, and Maoris be excluded, the number of persons received into gaol is reduced to 3,239, against

3,295 in 1894, a decrease of 56. In 1881, when the mean population was only 493,482 persons, the corresponding number of admissions was 4,207.

The number of persons in gaol (including Maoris) at the end of each of fifteen years is next given, with the proportion per 1,000 of the population (also including Maoris) for 1881 and 1895, showing again a great decrease in the number of prisoners :—

PRISONERS IN GAOL (31ST DECEMBER).

Year.	Undergoing Sentence.	Debtors and Lunatics.	On Remand and awaiting Trial.	Total.
1881	631	10	57	698
1882	570	8	58	636
1883	561	6	46	613
1884	560	5	64	629
1885	531	8	50	589
1886	558	6	61	625
1887	633	5	53	691
1888	605	2	34	641
1889	611	3	19	633
1890	517	3	42	562
1891	494	4	36	534
1892	433	5	38	476
1893	463	6	33	502
1894	483	4	68	555
1895	531	5	46	582

Proportion of prisoners in confinement at end of year, per 1,000 of population, including Maoris	1881.	1895.
	1·28	0·79

Of the prisoners previously convicted received in 1895, 317 men and 47 women had been convicted once; 199 men and 27 women twice; 742 men and 405 women three or more times : making a total of 1,258 men and 479 women.

Of 3,489 prisoners received, 3,052 were able to read and write, 125 could read only, 293 were unable to read, and 19 were of superior education.

Besides the returns from the Prisons Department, a separate card for each admission is furnished for every gaol. Such cards as show convictions are arranged alphabetically, and where several are found referring to the same person, all are thrown out but one; then the number of cards retained equals the actual number of distinct convicted prisoners received in the various gaols during the year. In 1895 this number (excluding Maoris) was 1,930, a decrease of 25 on the number in 1894. These figures do not include children committed to the industrial schools simply on the ground that they are neglected or destitute.

The following table shows the number of distinct persons (exclusive of Maoris) received into gaol after conviction during 1895, classified according to nature of offence, religion, birthplace and age :—

DISTINCT CONVICTED PRISONERS RECEIVED INTO GAOL, 1895.

[NOTE.—In this and the following tables a prisoner convicted of more than one offence during the year is reckoned once only, under the heading of the principal offence—*e.g.*, a prisoner convicted three times of drunkenness, twice of vagrancy, and once of theft, is counted only once, under the heading "Theft." Debtors and lunatics received into gaol, and children committed to the industrial schools not convicted of any crime, are omitted.]

	Offences against the Person.				Offences against Property.				Miscellaneous.						Totals.	
	Convicted on Indictment.		Summarily convicted.		Theft and Deceit.		Mischief.		Vagrancy.		Drunkenness.		Other Offences.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Religions—																
Church of England	20	1	71	1	262	14	20	2	89	45	119	34	175	5	756	102
Roman Catholic	14	4	37	3	105	9	17	1	63	49	144	49	111	4	491	119
Presbyterian	8	1	18	...	75	5	6	2	26	12	63	27	54	2	250	49
Wesleyan	2	...	2	...	24	1	2	...	7	...	6	2	11	1	54	4
Others	3	...	10	...	25	2	2	...	12	3	21	4	23	...	96	9
Totals	47	6	138	4	491	31	47	5	197	109	353	116	374	12	1,647	283
Birthplaces—																
England and Wales	17	...	45	...	132	5	11	2	61	27	111	17	116	2	493	53
Scotland	3	1	12	...	50	1	1	...	22	8	51	24	32	1	171	35
Ireland	10	1	27	2	58	11	11	...	35	43	119	49	68	5	328	111
New Zealand	12	3	33	1	185	11	14	3	47	24	27	15	98	3	416	60
Australian Colonies	...	1	9	1	27	3	4	...	10	5	12	5	18	...	80	15
Other British possessions	1	...	1	...	4	...	...	...	1	1	8	2	10	...	25	3
China	2	...	...	...	6	...	...	...	2	...	...	...	3	...	13	...
Other countries	2	...	11	...	29	...	6	...	19	1	25	4	29	1	121	6
Totals	47	6	138	4	491	31	47	5	197	109	353	116	374	12	1,647	283
Ages—																
Under 10 years	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...
10 and under 12 years	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...
12 and under 15 years	...	...	...	...	7	...	1	...	...	...	...	...	3	...	11	...
15 and under 20 years	4	1	4	...	96	7	8	...	9	3	2	2	26	...	149	13
20 and under 25 years	9	1	24	1	74	3	6	1	24	9	17	4	64	...	218	19
25 and under 30 years	6	1	25	...	72	3	7	1	26	19	29	12	64	2	220	38
30 and under 40 years	11	2	35	...	109	8	7	...	50	25	99	41	97	6	408	82
40 and under 50 years	9	1	27	3	77	7	7	3	35	32	91	33	65	3	311	82
50 and under 60 years	6	...	18	...	34	2	8	...	32	19	68	20	43	1	209	42
60 years and over	2	...	5	...	19	1	3	...	21	2	47	4	12	...	109	7
Totals, 1895	47	6	138	4	491	31	47	5	197	109	353	116	374	12	1,647	283
Totals, 1894	28	2	131	8	517	32	58	7	209	90	356	101	395	21	1,694	261

Of the above prisoners convicted, 49 (44 men and 5 women) were released upon probation under "The First Offenders' Probation Act, 1886," as against 25 in 1894, 13 in 1893, 11 in 1892, and 24 in 1891. During the year 1895, 118 persons were placed upon probation, as against 75 in 1894, and 59 in 1893. Forty-three carried out the conditions of their licenses satisfactorily and were discharged, 4 were rearrested and committed to prison, and 71 were at the end of the year still under the supervision of the Probation Officers completing their respective terms of probation. The Inspector of Prisons remarks, as to the working of the Act from the beginning, that "Of the 633 persons placed on probation since the Act came into force in October, 1886, 540 have been discharged after satisfactorily carrying out the terms of their licenses, 37 were rearrested and sentenced to various terms of imprisonment, 2 died, 16 have eluded the vigilance of the Probation Officer, and 38 remain on probation. The figures speak for themselves, and require no comment to show what a really good Act it is, and how well it is working."

The following shows the number of distinct persons (exclusive of Maoris) imprisoned in the past ten years after conviction, counting one offence only when the same person was imprisoned more than once. The proportion per 10,000 persons living is added for each year:—

Distinct Persons imprisoned after Conviction.

Year.	Prisoners.	Proportion per 10,000 of Population.	Year.	Prisoners.	Proportion per 10,000 of Population.
1886	2,774	47·82	1891	2,113	33·55
1887	2,639	44·25	1892	2,164	33·69
1888	2,531	41·81	1893	2,111	31·92
1889	2,399	39·00	1894	1,955	28·78
1890	2,397	38·61	1895	1,930	27·87

There has been since 1886 a decrease of 30·43 per cent. in the number of distinct convicted prisoners, and a reduction of 19·95 in the proportion to population. In New South Wales the proportion for 1892 was 75 per 10,000 persons.

It must be understood that the actual number of imprisonments was much in excess of the figures given, as many persons were several times imprisoned, either for offences differing in kind or for repetitions of the same offence. Thus, persons returned as imprisoned for larceny underwent other imprisonments for drunkenness, &c. Some returned as convicted of drunkenness were several times in gaol during the year for the same offence, or for another, such as assault, riotous or indecent conduct, &c. Often there were several charges preferred against the same person at the one time, of which the most serious followed by conviction has been selected.

The proportions of adherents of each of the four principal religious denominations in every 100 distinct convicted prisoners during the past five years are shown in the next table, with the percentages of population belonging to the same denominations at the date of the last census:—

RELIGIOUS DENOMINATIONS OF DISTINCT CONVICTED PRISONERS RECEIVED IN 1895.

Denominations of Convicted Prisoners.	Proportion per 100 of Convicted Prisoners.					Proportion of Denomination per 100 of Population at Census of 1896.
	1891.	1892.	1893.	1894.	1895.	
Church of England ..	42·17	43·21	44·48	44·66	44·46	40·27
Roman Catholic ..	33·18	33·13	33·16	31·72	31·61	14·09
Presbyterian ..	15·19	15·30	14·21	15·60	15·49	22·78
Wesleyan ..	2·84	3·65	2·99	3·22	3·00	10·44
Others	6·62	4·71	5·16	4·80	5·44	12·42

The following are the respective proportions of the convicted prisoners received at each age-period of life to every 100 prisoners of either sex for the years 1894 and 1895:—

AGES OF DISTINCT CONVICTED PRISONERS RECEIVED IN GAOL, 1894 AND 1895.

Age.	Male Prisoners.		Per 100 Male Prisoners.		Female Prisoners.		Per 100 Female Prisoners.	
	1895.	1894.	1895.	1894.	1895.	1894.	1895.	1894.
Under 20 years	163	124	9·90	7·32	13	12	4·59	4·60
20 and under 30 years ..	447	463	27·14	27·33	57	61	20·14	23·37
30 and under 40 years ..	408	429	24·77	25·32	82	69	28·98	26·44
40 and under 50 years ..	311	364	18·88	21·49	82	66	28·98	25·29
50 and under 60 years ..	209	226	12·69	13·34	42	42	14·84	16·09
60 years and upwards ..	109	88	6·62	5·20	7	11	2·47	4·21
Totals	1,647	1,694	100·00	100·00	283	261	100·00	100·00

Still excluding Maoris, the following are the proportions of dsitinct convicted prisoners, classified according to birthplace, for each of the past five years:—

BIRTHPLACES OF DISTINCT CONVICTED PRISONERS RECEIVED IN GAOL, 1891–1895.

Birthplace.	Number of Convicted Prisoners.					Proportion of each Nationality to every 100 Prisoners.					Proportion of Persons of each Nationality to every 100 of Population, 1896.
	1891.	1892.	1893.	1894.	1895.	1891.	1892.	1893.	1894.	1895.	
England & Wales	708	728	700	598	546	33·51	33·64	33·16	30·59	28·29	16·89
Scotland ..	259	270	252	231	206	12·26	12·48	11·94	11·82	10·68	7·18
Ireland ..	530	528	526	447	439	25·08	24·40	24·92	22·86	22·75	6·55
New Zealand ..	273	328	355	406	476	12·92	15·16	16·82	20·77	24·66	62·85
Australian Colonies	119	79	111	98	95	5·63	3·65	5·26	5·01	4·92	3·10
Other British possessions	33	47	29	28	28	1·56	2·17	1·37	1·43	1·45	0·53
China ..	14	3	10	9	13	0·66	0·14	0·47	0·46	0·67	0·53
Other foreign countries	177	181	128	138	127	8·38	8·36	6·06	7·06	6·58	2·37

Crime amongst the New-Zealand-born.

While the New-Zealand-born formed at the last census 63 per cent. of the whole population of the colony, they contributed in 1895 not more than 25 per cent. of the prisoners received in gaol. Of the New-Zealand-born population, however, a large number are under 15 years of age, a period of life at which there are very few prisoners; and, therefore, another comparison is necessary. It is found that the New-Zealand-born over 15 years formed 44 per cent. of the total population above 15; but, as before stated, New-Zealanders constituted only 25 per cent. of the total number received in gaols.

The total number of distinct prisoners (excluding Maoris) received for the year 1895—476 persons—is found to be 160 in excess of the number for 1890. Of those received in 1895, 146 were under twenty years of age.

As before stated, the plan adopted in preparing the foregoing tables is to count each prisoner only once, and to exclude all who are not convicted prisoners, besides dealing only with the number received during the year, instead of with the full number in gaol, which would, of course, include those brought forward from the previous year. The comparative results for a series of years given by this method are held to be more valuable than those brought out by one which includes prisoners merely awaiting trial, and continual repetitions of the same individuals.

Inquests.

The number of bodies on which inquests were held in 1895 was 934, including 25 Maoris. In 702 cases the bodies were of males, and in 232 of females. The verdicts may be classified as under:—

Nature of Verdict.	Inquests on Persons.		
	Males.	Females.	Total.
Accident	320	60	380
Disease and natural causes ..	285	147	432
Intemperance	6	..	6
Homicide	5	8	13
Suicide	66	10	76
Execution	..	1	1
Not classed	20	6	26
	702	232	934

Of the accidental deaths, drowning is still the most fatal form. The verdicts show that 135 bodies were found drowned, giving a percentage of 35·53 on the accidental deaths from all causes.

The inquests on suicidal deaths in 1895 were in excess of the numbers in 1894, 1893, and 1892. The numbers are,—

Year.	Inquests on Suicides.			Year.	Inquests on Suicides.		
	Males.	Females.	Total.		Males.	Females.	Total.
1892 ...	50	8	58	1894 ..	58	17	75
1893 ..	49	15	64	1895 ..	66	10	76

Fire Inquests.

The inquests on fires held during 1895 were 59. In twelve cases the verdict was incendiarism, in ten accident, and in thirty-seven no evidence was forthcoming.

SECTION XIII.—LICENSES AND LICENSED HOUSES, ETC.

LICENSES AND LICENSED HOUSES.

DURING the year ended the 31st March, 1896, 2,254 licenses for the sale of intoxicating liquors were granted. Of these, 1,561 were publicans' and accommodation licenses, 6 New Zealand wine, 37 bottle, 53 packet, 142 wholesale, and 455 conditional licenses. The fees paid for these licenses amounted to £54,209, and formed part of the revenue of the local governing bodies of the districts in which they were issued. Particulars are given in the following table :—

NUMBER OF LICENSES GRANTED DURING THE YEAR 1895–96, AND THE AMOUNT OF FEES PAID TO LOCAL BODIES THEREFOR.

Licenses.	In Counties.	In Boroughs.	Total
Publicans' licenses	646	676	1,322
Accommodation licenses	239	..	239
Total licensed houses	885	676	1,561
New Zealand wine licenses	1	5	6
Bottle licenses*	1	36	37
Packet licenses	9	44	53
Wholesale licenses	8	134	142
Conditional licenses	357	98	455
Total licenses granted	1,261	993	2,254
Amount of license-fees paid to local bodies	£20,951	£33,258	£54,209

The average number of persons to each licensed house in counties and boroughs respectively, for 1895–96, is next shown :—

	Number of Licensed Houses.†	Population.	Average Number of Persons to each Licensed House.
Counties	885	391,735	443
Boroughs	676	307,294	455
Totals	1,561	699,029‡	448

In 1894–95 the number of licensed houses in counties was 893, and those in boroughs 686, giving a total of 1,579 houses, or 18 more than in 1895–96. The average number of persons to a house increased from 416 in 1894–95 to 443 in 1895–96 in counties. In boroughs the average decreased from 458 to 455.

The annual fees paid for licenses are—

	£
(1.) For a publicans' license	
(*a.*) Within the limits of a borough or town district ..	40§
(*b.*) Outside the aforesaid limits	25
(2.) For a New Zealand wine license	1
(3.) For an accommodation license, a sum to be determined by the Licensing Committee, not exceeding	20
(4.) For a bottle license*	40

* By the Act of 1895 no new bottle licenses may be granted.
† *I.e.*, houses holding publicans' or accommodation licenses.
‡ Excluding (4,218) population on shipboard and adjacent islands.
§ Between the hours of six in the morning and ten at night. For an eleven o'clock license an additional £5 must be paid.

		£
(5.)	For a packet license—	
	(*a.*) For a vessel exceeding 50 tons register..	10
	(*b.*) For a vessel not exceeding 50 tons register	5
(6.)	For a wholesale license	20
(7.)	For a conditional license, according to duration of license, a sum not exceeding	30

The approximate capital value of the licensed houses in the counties was stated at £692,663, and the same for certain of the boroughs at £135,983. There was, besides, an annual value of £113,984 for other licensed houses in the boroughs.

Local Option Poll.

Under "The Alcoholic Liquors Sale Control Act, 1893," each electoral district constituted for the election of a member of the House of Representatives is a licensing district, and electors for the House of Representatives are also electors under the Licensing Acts.

Under the Amendment Act of 1895 the licensing poll is taken at the same time as the general election of members of the House of Representatives. The questions for the decision of the voters are,—

(1.) Whether the number of licenses existing in the district shall continue;

(2.) Whether the number shall be reduced;

(3.) Whether any licenses whatever shall be granted.

The voter may vote for one or two of these proposals, but no more.

The method of determining the result of the poll in each district by the Returning Officer is as follows:—

(1.) If the number of votes recorded in favour of the continuance of existing licenses is an absolute majority of all the voters whose votes were recorded, the proposal is to be deemed to be carried, and the licenses continue until the next poll, subject to certain provisions in special cases.

(2.) If the number of votes recorded in favour of a reduction in the number of licenses is an absolute majority of all the voters whose votes were recorded, the proposal is deemed to be carried, and supersedes the proposal for continuance of licenses. The Licensing Committee then reduces publicans' licenses by not less than 5 per cent. or more than 25 per cent. of the total number existing, excluding forfeitures. And provision is made that when a reduction vote is carried the licenses shall be reduced by one at least when the total number does not exceed ten, two when not over twenty, and three at least when the licenses exceed thirty.

(3.) If the number of votes recorded in favour of the proposal that no license shall be granted is not less than three-fifths of all the voters whose votes were recorded, the proposal is declared to be carried, and supersedes the proposal for reduction and for continuance, and no licenses can be granted.

(4.) If none of the proposals respecting licenses are carried by the prescribed majority the licenses continue as they are until next poll, subject to certain provisions in special cases.

The result of the poll taken on 4th December, 1896, for each licensing district is as under:—

District.	Number on Roll.	For Continuance.	For Reduction.	For No License.	Total Number of Persons who voted at Poll.			Informal Votes.	Result of Poll.
					Men.	Women.	Total.		
Bay of Islands	3,988	1,481	834	892	1,842	770	2,612	59	Continuance carried.
Marsden	4,110	1,281	1,331	1,583	1,951	1,122	3,073	..	No proposal carried.
Waitemata	4,881	1,749	1,220	1,314	2,075	1,230	3,305	73	Continuance carried.
Eden	5,203	1,869	1,449	1,472	1,930	1,696	3,626	118	"
City of Auckland	20,204	6,269	5,317	4,783	6,730	6,304	13,034	456	No proposal carried.
Parnell	5,521	1,926	1,538	1,360	1,977	1,908	3,785	39	Continuance carried.
Manukau	5,532	1,694	1,239	1,161	1,636	1,496	3,132	..	"
Franklin	4,733	1,959	1,670	1,607	2,236	1,554	3,790	127	"
Thames	5,141	2,017	1,532	1,775	2,693	1,295	3,988	126	"
Ohinemuri	5,667	2,066	1,144	1,533	2,878	968	3,846	194	"
Waikato	3,688	1,577	901	939	1,647	1,029	2,676	73	"
Bay of Plenty	3,949	1,699	1,093	1,131	1,906	1,194	3,100	130	"
Waiapu	4,881	1,911	1,610	1,896	2,478	1,484	3,962	84	No proposal carried.
Hawke's Bay	4,746	2,162	1,210	1,524	2,450	1,424	3,874	203	Continuance carried.
Napier	5,132	2,086	1,769	1,627	2,111	1,859	3,970	150	"
Waipawa	4,387	2,010	1,093	1,444	2,294	1,417	3,711	55	"
Pahiatua	4,057	1,417	1,106	1,561	2,057	1,128	3,185	86	No proposal carried.
Masterton	4,541	1,789	1,216	1,423	2,236	1,185	3,421	..	Continuance carried.
Wairarapa	4,337	2,142	1,048	1,161	2,250	1,359	3,609	..	"
Egmont	4,146	1,553	1,251	1,527	2,182	1,134	3,316	78	"
Taranaki	5,244	2,068	1,815	2,007	2,452	1,834	4,286	..	No proposal carried.
Hawera	4,105	1,440	1,531	1,794	2,041	1,372	3,413	66	"
Patea	3,985	1,354	1,094	1,295	1,897	940	2,837	98	"
Wanganui	5,252	2,307	1,591	1,748	2,246	1,960	4,206	..	Continuance carried.
Rangitikei	5,036	2,120	1,268	1,469	2,569	1,207	3,776	134	"
Palmerston	4,599	1,701	1,255	1,274	1,809	1,347	3,156	..	"
Manawatu	4,170	1,777	1,030	1,221	1,938	1,257	3,195	..	"
Otaki	3,929	1,780	747	629	1,866	1,288	3,154	..	"
Suburbs of Wellington ..	5,594	2,000	1,659	1,623	2,208	1,963	4,171	270	No proposal carried.
City of Wellington ..	19,304	6,826	5,663	4,951	7,377	5,791	13,168	458	Continuance carried.
City of Nelson	4,523	2,120	1,316	1,020	1,976	1,752	3,728	55	"
Motueka	3,666	1,672	802	854	1,824	1,161	2,985	124	"

RESULT OF LOCAL-OPTION POLL, 1896.—*continued.*

District,	Number on Roll.	For Continuance.	For Reduction.	For No License.	Total number of Persons who voted at Poll.			Informal Votes.	Result of Poll.
					Men.	Women.	Total.		
Wairau	5,123	2,536	1,160	1,123	2,363	1,745	4,108	149	Continuance carried.
Buller	5,013	2,281	1,387	1,498	2,740	1,615	4,355	7	"
Grey	4,508	2,134	1,120	1,127	2,359	1,131	3,490	..	"
Westland	4,614	2,196	950	982	2,329	1,217	3,546	194	"
Ashley	4,059	1,936	934	1,186	2,117	1,259	3,376	..	"
Kaiapoi	4,703	2,079	1,671	1,796	2,182	1,849	4,031	..	"
Avon	4,173	1,817	986	979	1,670	1,416	3,086	115	"
City of Christchurch ..	18,439	8,235	5,952	5,261	7,911	7,195	15,106	572	"
Lyttelton	4,282	2,004	1,048	1,120	1,891	1,603	3,494	125	"
Riccarton	4,120	2,108	992	949	1,808	1,506	3,314	121	"
Ellesmere	3,727	1,653	1,078	1,173	1,682	1,287	2,969	..	"
Selwyn	4,059	1,837	1,102	1,164	2,056	1,128	3,184	14	"
Ashburton	4,851	2,100	1,326	1,565	2,363	1,613	3,976	203	"
Geraldine	4,354	1,938	1,100	1,422	2,045	1,530	3,575	..	"
Timaru	4,773	2,060	1,531	1,560	1,934	1,775	3,709	94	"
Waitaki	4,373	1,751	1,317	1,625	2,165	1,300	3,465	..	"
Oamaru	4,615	2,163	1,603	1,615	2,152	1,751	3,903	80	"
Waihemo	4,077	1,880	1,120	1,294	2,078	1,267	3,345	116	"
Waikouaiti	3,991	1,635	1,187	1,278	1,694	1,409	3,103	53	"
City of Dunedin	18,571	7,897	5,284	4,466	7,133	7,450	14,583	..	"
Caversham	5,559	2,726	1,542	1,264	2,197	2,252	4,449	140	"
Taieri	3,859	1,590	1,098	1,124	1,766	1,124	2,890	58	"
Bruce	4,040	1,411	1,428	1,541	1,822	1,259	3,081	74	No proposal carried.
Tuapeka	3,907	1,894	945	1,052	2,098	1,097	3,195	..	Continuance carried.
Clutha	4,644	1,618	1,630	1,989	2,283	1,444	3,727	60	No proposal carried.
Mataura	4,997	2,145	1,431	1,657	2,368	1,565	3,933	68	Continuance carried.
Wakatipu	4,046	1,973	778	940	2,174	1,001	3,175	117	"
Wallace	3,927	1,951	784	1,027	2,111	1,064	3,175	..	"
Invercargill	5,713	2,558	1,770	1,824	2,288	2,255	4,543	..	"
Awarua	3,862	1,652	959	1,113	1,794	1,128	2,922	69	"
	339,230	139,580	94,555	98,312	151,235	108,663	259,898	..	

It will thus be seen that 139,580 votes were recorded in favour of continuance of existing licenses, 94,555 for reduction, and 98,312 for no license. In fifty-two districts the majority of voters were in favour of continuance, and in ten districts none of the proposals were carried. In four of the districts—namely, Marsden, Hawera, Bruce, and Clutha—a majority of those who polled voted for prohibition, but not the necessary three-fifths required to carry that issue.

Fire Brigades.

On the 31st December, 1896, there were eighty-five fire brigades in the colony, with a total strength of 1,600 (253 officers and 1,347 men). Compared with the numbers in 1895, these figures show an increase of three brigades and sixteen officers, but the number of men remains the same (1,347 in both years). Of the eighty-five brigades now existing, seventy-one belong to the United Fire Brigades Association of New Zealand.

SUPPLEMENTARY STATISTICS

Five Years' Progress, 1896 and 1891.

Summary.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris), April ..		703,360	626,658	76,702
Land in cultivation—				
Holdings (in cultivation) ..	No.*	46,676	38,178	8,498
Total area (including sown grasses and land in fallow)	Acres†	10,698,809	8,462,495	2,236,314
In crops	"	1,355,600	1,285,768	69,832
In sown grasses	"	9,285,170	6,966,218	2,318,952
In fallow	"	58,039	210,509	−152,470
Live-stock—				
Horses	No.	237,418	211,040	26,378
Cattle	"	1,047,901	831,831	216,070
Dairy cows (included above) ..	"	276,217	206,906	69,311
Sheep	"	19,138,493	16,753,752	2,384,741

Auckland Provincial District, 1896–1891.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris)—				
Auckland Provincial District ..		153,564	133,159	20,405
City of Auckland and Suburbs ..		57,616	51,287	6,329
Land in cultivation—				
Holdings	No.*	11,237	8,604	2,633
Total area (including sown grasses and land in fallow)	Acres	1,506,528	1,165,441	341,087
In crops	"	100,611	70,038	30,573
In sown grasses	"	1,400,531	1,060,741	339,790
In fallow	"	5,386	34,662	−29,276
Live-stock—				
Horses	No.	58,093	42,826	15,267
Cattle	"	286,406	234,306	52,100
Dairy cows (included above) ..	"	59,625	46,182	13,443
Sheep	"	1,741,379	1,500,102	241,277

Taranaki Provincial District, 1896–1891.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris—				
Taranaki Provincial District..	..	31,175	22,065	9,110
New Plymouth Borough ..	..	3,825	3,350	475
Land in cultivation—				
Holdings	No.*	3,385	2,578	807
Total area (including sown grasses and land in fallow)	Acres	517,137	308,072	209,065
In crops	"	18,402	15,380	3,022
In sown grasses	"	498,423	291,471	206,952
In fallow	"	312	1,221	−909
Live-stock—				
Horses	No.	14,407	10,915	3,492
Cattle	"	164,694	103,356	61,338
Dairy cows (included above) ..	"	56,479	26,951	29,528
Sheep	"	402,258	240,471	161,787

Note.—The minus sign (−) signifies decrease.

* Figures for 1895 and 1890.

† Not including 14,069 acres private garden, 3,080 acres market garden 19,303 acres in orchard, and 43,246 acres in plantations of forest trees.

HAWKE'S BAY PROVINCIAL DISTRICT, 1896–1891.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris)—				
Hawke's Bay Provincial District ..		34,038	28,506	5,532
Napier Borough		9,231	8,341	890
Land in cultivation—				
Holdings	No.*	2,187	1,718	469
Total area (including sown grasses and land in fallow)	Acres	1,256,879	1,085,454	171,425
In crops	"	37,168	36,218	950
In sown grasses	"	1,217,888	1,021,277	196,611
In fallow	"	1,823	27,959	-26,13
Live-stock—				
Horses	No.	13,742	13,480	262
Cattle	"	74,646	55,009	19,637
Dairy cows (included above) ..	"	10,224	9,039	1,185
Sheep	"	3,241,477	2,668,893	572,584

WELLINGTON PROVINCIAL DISTRICT, 1896–1891.

		1896.	1891.	Increase
Population (exclusive of Maoris)—				
Wellington Provincial District ..		121,854	97,725	24,129
City of Wellington and Suburbs ..		41,758	34,190	7,568
Land in cultivation—				
Holdings	No.*	7,055	5,375	1,680
Total area (including sown grasses and land in fallow)	Acres	2,159,402	1,508,587	650,815
In crops	"	75,426	63,313	12,113
In sown grasses	"	2,079,034	1,440,893	638,141
In fallow	"	4,942	4,381	561
Live-stock—				
Horses	No.	39,386	30,542	8,844
Cattle	"	206,857	155,466	51,391
Dairy cows (included above) ..	"	45,361	30,615	14,746
Sheep	"	3,746,622	2,750,461	996,161

MARLBOROUGH, NELSON, AND WESTLAND PROVINCIAL DISTRICTS, 1896–1891.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris)—				
Marlborough Provincial District ..		12,483	12,767	-284
Nelson Provincial District ..		35,734	34,770	964
Westland Provincial District ..		14,469	15,887	-1,418
Land in cultivation—				
Holdings	No.*	4,030	3,208	822
Total area (including sown grasses and land in fallow)	Acres	567,313	475,860	91,453
In crops	"	50,678	55,431	-4,753
In sown grasses	"	515,226	411,199	104,027
In fallow	"	1,409	9,230	-7,821
Live-stock—				
Horses	No.	14,556	15,181	-625
Cattle	"	55,641	48,816	6,825
Dairy cows (included above) ..	"	16,502	13,759	2,743
Sheep	"	1,709,961	1,631,456	78,505

* Figures for 1895 and 1890.

CANTERBURY PROVINCIAL DISTRICT, 1896–1891.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris),				
Canterbury Provincial District ..		135,858	128,392	7,466
City of Christchurch and Suburbs ..		51,330	47,846	3,484
Land in cultivation—				
Holdings	No.*	8,624	7,802	822
Total area (including sown grasses and land in fallow)	Acres	2,397,370	2,034,813	362,557
In crops	"	554,497	566,153	-11,656
In sown grasses	"	1,832,148	1,409,785	422,363
In fallow	"	10,725	58,875	-48,150
Live-stock—				
Horses	No.	44,439	47,567	-3,128
Cattle	"	90,067	82,058	8,009
Dairy cows (included above) ..	"	33,108	31,250	1,858
Sheep	"	4,301,300	3,559,533	741,767

OTAGO PROVINCIAL DISTRICT, 1896–1891.

		1896.	1891.	Increase or Decrease.
Population (exclusive of Maoris)—				
Otago Provincial District		163,944	153,097	10,847
City of Dunedin and Suburbs ..		47,280	45,869	1,411
Invercargill Borough and Suburbs ..		9,657	8,264	1,393
Land in cultivation—				
Holdings	No.*	10,158	8,893	1,265
Total area (including sown grasses and land in fallow)	Acres	2,294,160	1,884,268	409,912
In crops	"	518,818	479,235	39,583
In sown grasses	"	1,741,920	1,330,852	411,068
In fallow	"	33,442	74,181	-40,739
Live-stock—				
Horses	No.	52,795	50,529†	2,266
Cattle	"	169,590	152,820‡	16,770
Dairy cows (included above) ..	"	54,918	49,110§	5,808
Sheep	"	3,995,496	4,402,836	-407,340

TEMPERATURE.

A TABLE compiled from information published in the Statistical Abstract for the Colonial Possessions of the United Kingdom shows the shade temperature for each month in New Zealand and other British Colonies. The figures given are the means of four years. (H signifies highest, and L lowest) :—

* Figures for 1895 and 1890.
† Including Chatham Islands, 323.
‡ Including Chatham Islands, 450.
§ Including Chatham Islands, 111.

British Possessions (Stations and Height in Feet above Sea Level where known).	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Year.	
	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.
New Zealand—	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Wellington (140)	78	45	78	47	76	44	70	43	66	38	62	34	59	33	62	34	65	37	69	41	74	33	75	44	78	33
Queensland—																										
Brisbane (130)	92	64	93	63	91	61	85	54	80	50	76	42	75	39	78	41	85	46	91	50	94	57	97	61	97	39
New South Wales—																										
Sydney (155)	92	59	89	58	84	59	79	51	72	48	67	44	63	39	70	42	77	45	88	48	87	54	94	57	94	39
Victoria—																										
Melbourne (91)	101	48	99	47	99	45	86	40	74	37	64	37	62	32	68	34	74	34	81	40	94	44	96	45	101	32
South Australia—																										
Adelaide (140)	108	49	106	50	100	48	89	45	78	40	67	38	65	36	74	39	79	41	86	41	96	45	101	48	108	36
Western Australia—																										
Perth (47)	107	50	102	53	98	52	96	57	81	40	70	38	70	37	73	38	80	42	83	42	93	48	100	51	107	37
Tasmania—																										
Hobart (160)	91	45	94	45	93	44	75	38	71	37	61	34	59	33	66	33	72	35	77	35	92	40	86	43	94	33
Natal—																										
Durban (150)	99	63	95	61	94	60	94	58	89	52	86	49	88	48	91	49	96	50	91	53	97	57	98	59	99	49
Cape Town—																										
Royal Observatory (37)	94	54	90	51	92	49	86	45	80	42	76	39	74	37	76	37	83	39	86	44	89	48	90	52	94	37
Hongkong—																										
Observatory (110)	73	47	78	46	77	49	84	58	89	68	91	73	91	74	91	74	92	70	90	66	82	55	79	49	91	46
Straits Settlements—																										
Singapore (30)	88	70	90	70	91	71	91	73	90	73	90	72	90	72	89	72	89	71	89	71	89	71	89	70	91	70
Mauritius—																										
Royal Alfred Observatory (179) ...	84	69	84	71	84	70	82	70	80	62	77	60	75	59	75	59	77	62	80	62	82	66	84	68	84	59
Canada—																										
Toronto (350)	47	-3	45	-3	51	6	71	22	78	31	86	44	88	46	89	47	82	41	71	27	56	13	45	-1	89	-3
Montreal (187)	45	-14	42	-13	44	0	69	24	81	32	87	43	88	50	86	50	81	39	70	27	59	11	43	-11	88	-13
St. John (*N.B.*) (116)	49	-7	46	-7	47	4	62	22	69	33	81	42	79	49	77	48	73	37	60	26	56	16	49	-3	81	-7
Halifax (122)	50	-1	46	-3	50	10	63	22	73	32	83	39	84	48	84	49	80	36	69	29	60	21	51	3	84	-3
Charlottetown, Prince Edward Island (38)	47	-6	43	-9	47	5	60	20	70	31	77	39	80	49	79	49	75	39	66	30	58	19	47	1	80	-9
Winnipeg, Manitoba (764) ...	34	-37	32	-37	49	-25	76	8	82	20	90	35	87	40	91	34	86	30	73	17	53	-16	39	-20	91	-37
Victoria, British Columbia (10) ...	51	14	55	22	60	30	67	29	73	38	76	39	79	43	76	44	71	38	64	35	55	30	51	23	79	14
St. John's, Newfoundland (125) ...	48	-6	50	-8	50	11	61	15	71	27	76	33	81	41	79	42	78	33	65	24	62	19	51	9	81	-8
Barbados—																										
Joes River (430)	81	67	81	67	83	69	84	70	84	71	85	72	84	70	85	70	85	71	85	71	84	70	83	69	85	67
Bahamas—																										
Military Hospital	77	63	79	68	79	67	84	69	89	72	88	73	89	78	89	73	87	75	86	77	82	70	77	67	89	63
Jamaica—																										
Kingston (60)	91	63	90	63	90	62	91	68	91	70	92	71	95	71	93	73	92	70	93	69	91	67	90	63	95	62
Trinidad (130)	86	67	87	68	88	69	88	70	89	70	86	71	86	71	86	70	89	70	88	70	87	70	85	69	89	67

PART III.—ARTICLES ON SPECIAL SUBJECTS.

REPRESENTATION, AND THE GENERAL ELECTION OF 1896.

Representation.

On the basis of the results of the census of 1896 the colony is divided in accordance with the Representation Act Amendment Acts, 1887 and 1889, into sixty-two districts for purposes of European representation—fifty-eight rural districts having one member each, and four city electorates three members each. The Act of 1889 directed that in computing for electoral purposes the population of the colony 28 per cent. should be added to the country population—*i.e.*, all persons living outside towns of 2,000 inhabitants and over. The total population of the colony (other than Maoris), with the addition aforesaid, having been ascertained, was then divided by the number of members (70), and the quotient thus obtained formed the quota. The four city electoral districts (which have three members each) were so defined in extent that the population should be three times the quota. Inasmuch as it would be impossible to divide the country into a given number of districts all having exactly the precise quota of population, the law permits the Commissioners to make an allowance of 750 persons by way of addition to or deduction from the population of rural districts, and of 100 in case of city electorates; and due consideration is given to community of interest, facilities of communication, and topographical features, as far as possible, in forming the districts.

"The Representation Act Amendment Act, 1896," provides for two permanent Commissions, called the "North" and "Middle" Island Representation Commissions. These sit together as a joint Commission for the purpose of fixing the number of districts for the North and Middle Islands respectively, but afterwards act separately and independently of one another, the duties and functions of each being confined to their respective island.

The North Island with its adjacent islands includes 30 electoral districts, having 34 members; the Middle and Stewart Islands having 32 districts and 36 members. In 1893 the North Island returned 31 and the Middle Island 39 members. But movement of population has resulted in the addition of three members to the North, and a corresponding reduction in the Middle Island.

These districts are, as above stated, for purposes of European representation. But the colony is again divided into four districts for purposes of Maori representation, under the electoral law, each district having one Native member elected by the Maoris; so that

the House of Representatives consists of 74 members altogether—70 Europeans and 4 Maoris.

The Electoral Acts.

By the principal Act, which came into force in 1893, the great step was taken of admitting women to the franchise. The Amendment Act of 1896 abolished the non-residential or property qualification, with a saving clause in favour of then-existing registrations in respect of such qualification.

The General Election of 1896.

For European Representatives.

(Polling-day, 4th December, 1896. Number of Polling-places, 1,521.)

Dealing with the population of both sexes, it is found that the total number of persons on the rolls was 339,230, out of a total adult population estimated at 356,658. These results give a proportion of 95·11 per cent. of adults who were registered as electors, as against 94·98 at the previous election in 1893. The number of persons who voted was 258,254, or 76·13 per cent. of the number on the rolls, a slightly higher proportion than obtained in 1893, which was 75·25 per cent.

Date of General Election.	Total Adult Persons.	Number on Rolls.	Proportion of Adult Persons registered as Electors.	Number of Persons who voted.	Proportion of Persons on Rolls who voted.
1893	319,010	302,997	94·98	220,082	75·25*
1896	356,658	339,230	95·11	258,254	76·13

Dealing with men only, the number on the rolls was 196,925, or almost the full number of adult males in the colony as estimated from the census. It would seem that the rolls must have been, at any rate, more accurate than in 1893, when the number of male names was actually fourteen thousand above the estimated adult male population. The males who voted in 1896 were 149,471, or 75·90 per cent. of those on the rolls, against 69·61 per cent. in 1893.

Date of General Election.	Total Adult Males.	Number on Rolls.	Proportion of Adult Males registered as Electors.	Number who voted.	Proportion of Males on Rolls who voted.
1893	179,539	193,536	†	129,792	69·61*
1896	197,002	196,925	99 96	149,471	75·90

* Excluding figures for three electorates in which there was no contest.
† The number on rolls was in excess of the estimated adult male population at the date of the election.

The figures relating to women show that a larger proportion (89·13 per cent.) of adults were registered as electors in 1896 than in 1893 (78·48 per cent.), which would indicate an increasing disposi-

tion to use the franchise. But the number of women who voted, 108,783, is only 76·44 per cent. of the females on the rolls, while in 1893 there were 90,290 who voted, giving the higher proportion of 85·18 per cent.; so that as to actual voting (assuming the figures to be correct) there is no proof of a greater willingness now on the part of the females to go to the poll than at the time the franchise was conferred upon them.

Date of General Election.	Total Adult Females.	Number on Rolls.	Proportion of Adult Females registered as Electors.	Number who voted.	Proportion of Females on Rolls who voted.
1893	139,471	109,461	78·48	90,290	85·18*
1896	159,656	142,305	89·13	108,783	76·44

* Excluding figures for three electorates in which there was no contest.

The following table shows for the different districts the number of electors of each sex on the rolls, with the voters, and the estimated population:—

District.	Number of Members.	Estimated Population, 4th Dec., 1896.	Electors on Roll.		Number of Voters who recorded Votes.	
			Males.	Females.	Males.	Females.
Bay of Islands ..	1	9,980	2,834	1,154	1,837	770
Marsden	1	9,797	2,628	1,482	1,941	1,132
Waitemata	1	9,536	3,194	1,687	2,554	705
Eden	1	10,617	2,769	2,434	1,863	1,708
City of Auckland ..	3	36,039	10,872	9,332	6,730	6,304
Parnell	1	10,893	2,655	2,866	1,838	1,908
Manukau	1	10,592	2,939	2,593	1,612	1,577
Franklin	1	10,147	2,641	2,092	2,212	1,682
Thames	1	10,222	3,509	1,632	2,680	1,295
Ohinemuri ..	1	9,600	4,181	1,486	2,811	968
Waikato	1	10,034	2,250	1,438	1,595	1,015
Bay of Plenty ..	1	9,537	2,436	1,513	1,864	1,194
Waiapu	1	9,544	3,100	1,781	2,430	1,484
Hawke's Bay ..	1	9,717	3,023	1,723	2,435	1,395
Napier	1	11,434	2,742	2,390	2,244	1,921
Waipawa	1	8,745	2,721	1,666	2,187	1,524
Pahiatua	1	8,637	2,625	1,432	2,028	1,131
Masterton	1	9,638	2,963	1,578	2,223	1,185
Wairarapa	1	8,670	2,742	1,595	2,223	1,321
Egmont	1	9,523	2,706	1,440	2,160	1,136
Taranaki	1	10,736	2,912	2,332	2,374	1,872
Hawera	1	8,707	2,487	1,618	2,023	1,360
Patea	1	8,658	2,771	1,214	1,862	930
Wanganui	1	10,412	2,881	2,371	2,182	1,960
Rangitikei	1	9,572	3,379	1,657	2,523	1,207
Palmerston	1	10,342	2,701	1,898	1,809	1,347
Manawatu	1	8,725	2,553	1,617	1,893	1,257
Otaki	1	8,650	2,329	1,600	1,850	1,288
Suburbs of Wellington	1	10,717	2,864	2,730	2,185	1,951

District.	Number of Members.	Estimated Population, 4th Dec., 1896.	Electors on Roll.		Number of Voters who recorded Votes.	
			Males.	Females.	Males.	Females.
City of Wellington ..	3	36,020	11,028	8,276	7,377	5,791
City of Nelson ..	1	10,879	2,400	2,123	2,012	1,767
Motueka	1	9,342	2,210	1,456	1,817	1,161
Wairau	1	10,538	2,958	2,165	2,338	1,745
Buller	1	9,741	3,184	1,829	2,718	1,615
Grey	1	10,020	2,908	1,600	2,307	1,134
Westland	1	9,468	3,244	1,370	2,314	1,217
Ashley	1	9,496	2,535	1,524	2,108	1,249
Kaiapoi	1	9,923	2,501	2,202	2,156	1,875
Avon	1	9,827	2,037	2,136	1,646	1,392
City of Christchurch ..	3	36,032	9,244	9,195	7,507	7,599
Lyttelton	1	10,789	2,243	2,039	1,863	1,617
Riccarton	1	9,100	2,276	1,844	1,787	1,490
Ellesmere	1	9,579	2,156	1,571	1,816	1,235
Selwyn	1	9,401	2,510	1,549	2,042	1,128
Ashburton	1	10,331	2,878	1,973	2,002	1,604
Geraldine	1	9,130	2,528	1,826	2,045	1,530
Timaru	1	10,300	2,498	2,275	1,947	1,775
Waitaki	1	9,661	2,787	1,586	2,218	1,261
Oamaru	1	10,292	2,524	2,091	2,072	1,751
Waihemo	1	9,383	2,484	1,593	2,031	1,267
Waikouaiti	1	9,576	2,182	1,809	1,694	1,409
City of Dunedin ..	3	35,496	8,907	9,664	7,133	7,450
Caversham	1	11,511	2,718	2,841	2,149	2,253
Taieri	1	9,613	2,265	1,594	1,714	1,124
Bruce	1	8,877	2,361	1,679	1,759	1,259
Tuapeka	1	9,421	2,513	1,394	2,038	1,119
Clutha	1	9,952	2,808	1,836	2,242	1,444
Mataura	1	9,904	3,005	1,992	2,343	1,560
Wakatipu	1	9,567	2,765	1,281	1,982	1,001
Wallace	1	9,401	2,565	1,362	2,066	1,064
Invercargill	1	10,909	2,869	2,844	2,290	2,253
Awarua	1	9,645	2,427	1,435	1,770	1,117

Particulars are given for the four city electorates where the electors have the right of voting for three members:—

The number of votes exercisable is more than ten thousand in excess of those recorded, so that some of the electors evidently voted for only one or two candidates.

City.	Number of Members returned.	Electors on the Rolls.			Voters who recorded Votes.			Number of Votes recorded.	Number of Votes exercisable by Persons who voted.
		Men.	Women.	Total.	Men.	Women.	Total.		
Auckland ..	3	10,872	9,332	20,204	6,730	6,304	13,034	36,819	39,102
Wellington ..	3	11,028	8,276	19,304	7,377	5,791	13,168	37,624	39,504
Christchurch ..	3	9,244	9,195	18,439	7,507	7,599	15,106	42,551	45,318
Dunedin ..	3	8,907	9,664	18,571	7,133	7,450	14,583	40,047	43,749
Total ..	12	40,051	36,467	76,518	28,747	27,144	55,891	157,041	167,673

A return is added showing the number of votes recorded for each candidate:—

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Bay of Islands:		
Houston, R. M.	1,599	
Press, John	1,008	2,607
Marsden:		
Thompson, R.	1,761	
Mason, A. H.	1,312	3,073
Waitemata:		
Monk, R.	1,715	
Jackman, W. H. H.	1,544	3,259
Eden:		
Bollard, John	1,892	
Palmer, Jackson	1,679	3,571
City of Auckland:		
Thompson, T.	7,192	
Holland, J. J.	6,298	
Crowther, W.	6,004	
Rosser, A.	4,676	
Button, C. E.	4,008	
Mitchelson, E.	3,620	
Fowlds, G.	3,152	
Fawcus, J.	906	
Shera, J. McE.	609	
Eugster, E.	354	36,819
Parnell:		
Lawry, F.	1,773	
Vaile, S.	1,303	
Withy, A.	670	3,746
Manukau:		
O'Rorke, Sir G. M.	1,702	
Buckland, W. F.	1,487	3,189
Franklin:		
Massey, W. F.	2,184	
Harris, B.	1,710	3,894
Thames:		
McGowan, J.	2,149	
Taylor, E. H.	1,826	3,975
Ohinemuri:		
Cadman, A. J.	2,908	
Edwards, E.	871	3,779
Waikato:		
Lang, F. W.	1,811	
Walker, E.	799	2,610
Bay of Plenty:		
Herries, W. H.	1,596	
Kelly, W.	1,462	3,058
Waiapu:		
Carroll, J.	2,142	
Fitzroy, C. A.	1,772	3,914
Hawke's Bay:		
Russell, W. R.	2,341	
Fraser, A. L. D.	1,489	3,830
Napier:		
McLean, R. D. D.	2,456	
Carnell, S.	1,709	4,165
Waipawa:		
Hunter, G.	1,961	
Hall, C.	1,750	3,711
Pahiatua:		
O'Meara, J.	1,000	
Manisty, R.	963	
McCardle, W. W.	848	
Taylor, J.	232	
Whitcombe, G.	116	3,159
Masterton:		
Hogg, A. W.	1,859	
Duncan, D. J.	1,549	3,408
Wairarapa:		
Buchanan, W. C.	1,940	
Hornsby, J. T. M.	1,604	3,544
Egmont:		
Symes, W.	1,489	
Monkhouse, W.	1,142	
Harkness, J. G.	665	3,296
Taranaki:		
Brown, H.	2,008	
Smith, E. M.	1,852	
Bellringer, C. E.	386	4,246
Hawera:		
McGuire, F.	1,182	
Robbins, B. C.	1,146	
Major, C. E.	1,055	3,383
Patea:		
Hutchison, G.	1,534	
Remington, A. E.	1,258	2,792
Wanganui:		
Carson, G.	2,098	
Willis, A. D.	2,044	4,142
Rangitikei:		
Lethbridge, F. Y.	1,992	
Bailey, W. A. L.	1,738	3,730
Palmerston:		
Pirani, F.	1,608	
Buick, D.	1,548	3,156
Manawatu:		
Stevens, J.	1,333	
Bruce, R. C.	1,264	
Kellow, F. P.	553	3,150
Otaki:		
Field, H. A.	1,799	
Newman, A. K.	1,339	3,138

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Suburbs of Wellington:		
Wilford, T. M.*	2,194	
Hislop, T. W.	1,942	4,136
City of Wellington:		
Hutcheson, J.	6,411	
Stout, Sir R.	6,306	
Fisher, G.*	5,859	
Atkinson, A. R.	5,831	
Wilson, C.	5,570	
Menteath, A. A. S.	5,560	
Fraser, F. H.	1,811	
Powell, J. J. K.	185	
Warburton, A.	91	37,624
City of Nelson:		
Graham, J.	2,061	
Piper, J.	1,718	3,779
Motueka:		
McKenzie, R.	1,306	
Hursthouse, R.	1,180	
Franklyn, W. N.	492	2,978
Wairau:		
Mills, C. H.	2,068	
Buick, T. L.	2,015	4,083
Buller:		
O'Regan, P. J.	2,310	
Colvin, J.	2,023	4,333
Grey:		
Guinness, A. R.	2,653	
Bell, R. F.	788	3,441
Westland:		
Seddon, R. J.	2,707	
Grimmond, J.	824	3,531
Ashley:		
Meredith, R.	1,700	
Reece, H. F.	1,328	
Renner, G.	329	3,357
Kaiapoi:		
Moore, R.	2,145	
Buddo, D.	1,886	4,031
Avon:		
Tanner, W. W.	1,552	
McIntyre, G.	1,095	
Swann, G.	307	
Burgess, C.	84	3,038
City of Christchurch:		
Lewis, C.	6,570	
Smith, G. J.	5,940	
Taylor, T. E.	5,445	
Collins, W. W.	5,309	
Ell, H. G.	4,705	
Beswick, H. J.	3,874	
Donnelly, M.	3,709	
Cullen, W.	3,365	
Marciel, J. A. H.	2,982	
Taylor, R. M.	555	
Partridge, J. T.	97	42,551
Lyttelton:		
Joyce, J.	1,734	
Jacques, W.	1,288	
Webb, S. R.	458	3,480
Riccarton:		
Rolleston, W.	1,834	
Russell, G. W.	1,443	3,277
Ellesmere:		
Montgomery, W. H.	1,806	
Anson, F. A.	1,245	3,051
Selwyn:		
Wason, J. C.	1,676	
Saunders, A.	1,494	3,170
Ashburton:		
Wright, E. G.	1,320	
McLachlan, J.	1,078	
Sawle, J. W.	981	
Ivess, J.	227	3,606
Geraldine:		
Flatman, F. R.	1,893	
Rhodes, A. E. G.	1,682	3,575
Timaru:		
Hall-Jones, W.	2,181	
Smith, F. H.	1,541	3,722
Waitaki:		
Steward, W. J.	2,012	
Sutherland, D.	1,013	
Clarke, C. V.	299	
Parker, H. R.	155	3,479
Oamaru:		
Duncan, T. Y.	2,297	
Sievwright, J. D.	1,526	3,823

* An election petition against the return of Mr. G. Fisher, lodged by Mr. A. R. Atkinson, the candidate who stood fourth at the poll, was tried in February, 1897, before two Judges sitting as an Election Petition Court. A re-count and scrutiny of votes polled by Messrs. Fisher and Atkinson resulted in a report that "the said George Fisher was found to have polled 5,829 votes, and the said Arthur Richmond Atkinson 5,789 votes, giving thereby the said George Fisher a majority of forty votes." The Court determined that the said George Fisher was duly elected. For full grounds of petition see *Hansard*, Sess. I., 1897, p. 7.

The same Court determined that the election of Mr. T. M. Wilford was void, the grounds of the petition being corrupt and illegal practices. Mr. Charles Wilson was elected for Suburbs of Wellington on 23rd April, 1897.

The same Court upheld the election of Henare Kaihau, after hearing a petition against it.

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate	Total.
Waihemo:		
McKenzie, J.	1,926	
Duncan, J., jun.	1,372	3,298
Waikouaiti:		
Allen, E. G...	1,427	
Ramsay, J. J.	661	
Green, J. ..	588	
Thomson, A.	370	
Clark, G. J...	57	3,103
City of Dunedin:		
Mackenzie, M. J. S.	7,821	
Millar, J. A.	6,236	
Fish, H. S. ..	6,067	
Pinkerton, D.	5,723	
Hutchison, W.	5,016	
Begg, A. C. ..	4,412	
Earnshaw, W.	2,421	
Gore, J. ..	1,300	
Burton, A. H.	374	
Aston, M. ..	272	
Lester, F. M.	209	
Nicol, D. ..	196	40,047
Caversham:		
Morrison, A.	2,307	
Sidey, T. K.	1,126	
Wardrop, W.	664	
Barron, W. ..	305	4,402
Taieri:		
Carncross, W. C. F.	1,679	
Graham, J. ..	1,159	2,838
Bruce:		
Allen, J. ..	2,039	
Auld, W. ..	979	3,018
Tuapeka:		
Larnach, W. J. M.	1,589	
Rawlins, C. C.	1,568	3,157
Clutha:		
Thomson, J. W.	1,991	
Edie, J. ..	1,076	
Ayson, T. ..	415	
Blair, J. ..	204	3,686
Mataura:		
Richardson, G. F.	2,052	
McNab, R. ..	1,851	3,903
Wakatipu:		
Fraser, W. ..	1,595	
George, J. ..	1,260	
Graham, H.	128	2,983
Wallace:		
Gilfedder, M.	820	
Neave, T. ..	655	
Valentine, H. S.	645	
Hirst, H. ..	510	
Mackintosh, J.	500	3,130
Invercargill:		
Kelly, J. W.	2,238	
Sinclair, J. ..	1,659	
Scandrett, W. B.	646	4,543
Awarua:		
Ward, J. G...	1,836	
Cowan, C. ..	1,051	2,887

—	1896.	1893.	1890.
Number of votes recorded for members elected	184,929	153,663	88,150
Number of votes recorded for defeated candidates	174,475	149,413	61,875
Total votes recorded*	359,404	303,076	150,025
Number of names on rolls in districts uncontested	..	10,539	13,688
Number of names on rolls in districts where elections were contested	339,230	292,458	169,483
Total number of electors	339,230	302,997	183,171
Total population at last census	703,119	626,359	573,557

* Total number of electors who recorded their votes: 258,254 in 1896, and 220,082 in 1893.

For Maori Representatives.

(Polling-day, 19th December, 1896.)

Of a Maori population amounting to 39,854 persons, 13,008 voted at the general election. In 1893 the voters numbered 11,269, or 1,739 persons fewer than on the last occasion. As the Native population did not increase between 1891 and 1896, but rather diminished somewhat, it would appear that Maoris are taking more interest as to their representation in Parliament than formerly, or that there is now more convenience for attending to vote and better knowledge of political affairs. The numbers of voters for the several districts were:—

Electoral Districts	Population.			Number who voted.	Per Cent. of Population at all Ages.
	Males.	Females.	Totals.		
North Island—					
Northern Maori ..	5,165	4,010	9,175	2,104	22·93
Eastern Maori ..	6,931	6,064	12,995	4,164	32·0
Western Maori ..	8,247	6,893	15,140	6,072	40·11
Middle Island—					
Southern Maori ..	1,330	1,214	2,544	668	26·26
Totals ..	21,673	18,181	39,854	13,008	32·64

The votes recorded for each candidate were:—

Electoral Districts and Names of Candidates.	Number of Votes recorded.	
	For each Candidate.	Total.
Northern Maori Electoral District:		
Hone Heke	1,706	
Eparaima Kapa ..	398	2,104
Eastern Maori Electoral District:		
Wi Pere	2,549	
Tamati Tautuhi ..	805	
Tare Mete	563	
Maika Taruke ..	182	
Eriata Nopera ..	65	4,164
Western Maori Electoral District:		
Henare Kaihau ..	1,601	
Ropata te Ao ..	887	
Mehia Keepa te Rangihiwinui	866	
Ngarangi Katitia ..	662	
Hone Omipi ..	577	
Western Maori Electoral District—contd.		
Te Aohau Nikitini ..	435	
Pepene Eketone ..	351	
Wiremu Ngapaki ..	261	
Reha Aperahama ..	185	
Te Ramana Nutana ..	168	
Wirihana Hunia ..	49	
Hohepa Horomana ..	22	
Te Kahui Kararehe ..	8	6,072
Southern Maori Electoral District:		
Tame Parata ..	262	
Tame Rangiwahia Erihana	149	
Riki te Mairaki Taiaroa	144	
Teoti Pita Mutu ..	113	668
Total		13,008

GENERAL ELECTIONS FOR EUROPEAN REPRESENTATIVES HELD FROM THE YEAR 1853.

Parliament.	Date of General Election.	Number of Names on Roll of Electors.	Number of Members returned.	Number of Members returned unopposed.	Number of Votes recorded (or of Voters recording Votes).	Population of the Colony at end of Year.	Average Number of		
							Persons to each Member.	Persons to each Elector.	Electors to each Member.
First	1853	[1] 5,934	37	*	*	30,000	811	5·1	160
Second	1855	[2] 10,324	37	*	*	37,192	1,005	3·6	279
Third	1861	13,466	53	*	*	79,711	1,504	5·9	254
Fourth	1866	[3] 33,338	72	*	*	190,607	2,647	5·7	463
Fifth	1871	47,275	74	*	*	248,400	3,357	5·3	639
Sixth	1875	61,755	84	*	*	375,856	4,474	6·1	735
Seventh ..	1879	82,271	84	14	43,776	463,729	5,521	5·6	979
Eighth	1881	120,972	91	11	69,985	500,910	5,505	4·1	1,329
Ninth	1884	137,686	91	11	74,672	564,304	6,201	4·1	1,513
Tenth	1887	175,410	91	5	111,911	603,361	6,630	3·4	1,928
Eleventh ..	1890	183,171	70	6	136,337	625,508	8,936	3·4	2,617
Twelfth	1893	[4]302,997	70	3	[4][5]220,082	672,265	9,604	2·2	4,328
Thirteenth ..	1896	[4]339,230	70	..	[4][5]258,254	714,162	10,202	2·1	4,853

*Information not obtainable.

[1] Including 100, the estimated number in Akaroa District, for which there is no return.
[2] Including 800, the estimated number in the electorates of Town of New Plymouth, Grey and Bell, and Omata, for which districts there are no returns.
[3] Electors for the Electoral District of "The Otago Goldfields" not included.
[4] Men and women.
[5] Voters recording votes.

THE LAND SYSTEM OF NEW ZEALAND.

By S. PERCY SMITH, F.R.G.S., Secretary for Crown Lands and Surveyor-General.

THE Crown lands of New Zealand are administered under "The Land Act, 1892," together with its amendments and the regulations made thereunder.

The distinguishing features of the present land system are the outcome of ideas which have been gradually coming to maturity for some years past in this colony. These features involve the principle of State-ownership of the soil, with a perpetual tenancy in the occupier. This, whatever may be the difference in detail, is the prevailing characteristic of the several systems under which land may now be selected. In New Zealand this tendency to State-ownership has taken a more pronounced form than in any other of the Australasian Colonies, and the duration of the leases has become so extended as to warrant the name, frequently given to them, of "everlasting leases." In point of fact, most of the Crown lands are now disposed of for terms of 999 years. The rentals are based on the

assessed value of the land at the time of disposal, without increase or recurring valuations. Under this system there is a fixity of tenure practically equal to freehold, and which, like freehold, necessarily carries with it the power of sale, sub-lease, mortgage, or disposition by will. Since all lands held under the Crown by "lease in perpetuity" are subject to the land-tax, the necessity for the periodical revaluations under the perpetual-lease system is done away with, the State reaping the advantage of the unearned increment through the beforementioned tax. At the same time the improvements made in the soil by cultivation, &c., are secured to the tenant.

The advantages of this system to the selector are manifest. When it is taken into consideration that, with few exceptions, the Crown lands are, in their prairie condition, incapable of producing anything until brought into cultivation, the advantage to the settler of setting free his capital to develop the capabilities of the soil, rather than having to expend it in the purchase of a freehold, is very apparent. One of the most striking benefits of this system is the advantage it gives to the poor man, who, with little more capital than his strong right arm, is enabled to make a home for himself; which, under the freehold system, he is frequently unable to accomplish.

The values placed on the Crown lands are, as a rule, low, for the State does not so much seek to raise a revenue directly therefrom as to encourage the occupation of the lands by the people; this secures indirectly an increased revenue, besides other advantages resulting from a numerous rural population.

Again, underlying the whole of the New Zealand land system is a further application of the principle of "the land for the people"—viz., the restriction in area which any man may hold. This subject has been forced upon the attention of the Legislature by defects in former systems, under which one individual with means at his command could appropriate large areas, to the exclusion of his poorer fellow-settler. Under conditions where the price at which the land is offered is fixed, and where choice of selection is by ballot, the poor settler has the same chance as the rich one, and may, should he wish it, hold as much land. The limit that a selector may hold is so fixed as to encourage the class of small farmers, and up to that limit the amount he may select is left entirely to himself. The Act defines the amount of land any one may select at 640 acres of first-class, or 2,000 acres of second-class land, inclusive of any land he may already hold. These limits apply to lands which are thrown open for "free selection," as it is termed, but in some cases, where found desirable, the limit is by regulation made much smaller.

In addition to the many advantages offered by the "lease-in-perpetuity" system, the Land Act provides others, to meet the wants of different classes. The rule is almost invariable, that land thrown open for so-called "free selection" is offered to the public under three different tenures, and the choice left entirely to the would-be settler. The three tenures are:—

(1.) For cash, in which one-fourth of the purchase-money is paid down at once, and the remainder within thirty days. The title does not issue until certain improvements have been made on the land.

(2.) Lease with a purchasing clause, at a 5-per-cent. rental on the value of the land; the lease being for twenty-five years with the right to purchase at the original upset price at any time after the first ten years.

(3.) Lease in perpetuity, at a rental of 4 per cent. on the capital value, as already described above.

The present land-laws have been in force since the 1st November, 1892, and, therefore, the returns of the Department of Lands and Survey for the year ending the 31st March, 1897, in respect of lands the tenure of which is optional, will give a fair idea of the proportions in which lands have been disposed of under the three systems during last year, and they show that the occupation with right of purchase and lease in perpetuity are just about equal in popular favour:—

1. Cash: 90 selections, 9,835 acres.
2. Occupation with right of purchase: 277 selections, 59,648 acres.
3. Lease in perpetuity: 278 selections, 62,229 acres.

"The Land Act, 1892," provides for a special class of settlement called "small-farm associations," which found favour with the public to a very considerable extent during the first three years after the Act of 1892 came into force, but is now superseded to a large extent by the "improved-farm settlements" system. The "small-farm association" system provides that, where not less than twelve individuals have associated themselves together for mutual help, such an association can, with the approval of the Minister of Lands, select a block of land of not more than 11,000 acres, but there must be a selector to each 200 acres in the block. The extreme limit that one person may hold is fixed at 320 acres. Settlements of this class are held on "lease in perpetuity" for 999 years, in the same way as lands under the same tenure when thrown open for free selection. The conditions of residence and improvement are the same. The system offers many advantages to the settler, so long as the blocks of land are judiciously chosen, having regard to quality of land, access, markets, and the probability of employment being obtained in the neighbourhood. In the eagerness to obtain lands on such easy terms, these points have, in the past, not received sufficient attention by some of the associations, and in consequence their success remains to be proved.

The following figures show the extent to which settlers have availed themselves of this class of settlement during the five years ending the 31st March, 1897; the figures represent approved applications only: 1,770 selectors have taken up 349,899 acres, in various parts of the colony, but principally in the Wellington District.

The "village-settlement system" of New Zealand has become widely known in the Australian Colonies, and has excited much inquiry with a view to its adoption in other parts. It is believed, however, that this and the "small-farm association" settlements, referred to above, are often confounded in the minds of the public, for of recent years there has been no very great extension of village settlements in this colony. (For details, see Mr. March's article, p 370.) The system was initiated in 1886 by the late Hon. John Ballance, with the intention of assisting the poorer classes to settle on the land. It became immediately very popular, and by its means a considerable number of people were settled on the land who might otherwise never have become landholders. The features of the system were, originally, the possession of a small farm, not exceeding 50 acres in extent, held under a perpetual lease for terms of thirty years, with recurring valuations at the end of each term. The rental was 5 per cent. on a capital value of not less than £1 an acre. Residence and improvement of the soil were compulsory. The new and important feature in the village-settlement scheme, however, was the advance by the State of a sum not exceeding £2 10s. per acre, up to 20 acres, for the purpose of enabling the settler to cultivate the land, and of a further sum not exceeding £20 to build a house with, on which he paid interest at the rate of 5 per cent. Road-works were also very frequently undertaken in the neighbourhood of these settlements, and have been of very great help to the settlers. Under this system a number of settlements were formed, and, where the sites were chosen judiciously, a large measure of success has resulted therefrom.

The present law admits of similar village settlements, but the area which a selector may hold has been increased to 100 acres, and the tenure changed to a "lease in perpetuity" for 999 years, on a 4-per-cent. rental. Advances for clearing and house-building have, however, practically ceased, and, indeed, few settlements have lately been started, one of the principal reasons being the dearth of suitable lands on which to plant them. Crown lands adapted to the special features of "village settlements" are scarce.

The "improved-farm settlements" system, so far as can be judged at present, will eventually take the place of both the "village settlement" and the "small-farm association." In order to find work for the unemployed, considerable areas of forest-clad Crown lands have been set aside, and small contracts for the clearing, burning, and sowing these with grass have been let. The land is then subdivided into small farms, and let on "lease in perpetuity," at a rental sufficient to cover the cost of clearing, &c., together with a fair rental of the land. Up to the 31st March, 1897, forty-three settlements had been allocated, covering an area of 70,196 acres, situate in various parts of the colony. At that date 646 settlers had been allotted sections, and they had felled and grassed 9,894 acres. The amount paid to the settlers up to the 31st March was £36,221, and the value of improvements on the land (including

the Government advances) was £49,690. At the same date 1,229 persons were living on the lands.

The size of holdings averages about 100 acres.

With respect to other methods of dealing with the Crown estate, the "Digest of the Land-laws" appended hereto will give sufficient particulars.

THE LAND FOR SETTLEMENTS ACTS, 1892 AND 1894.

Allusion has already been made to the dearth of Crown lands suitable for small settlements in localities where they are most needed—*i.e.*, in settled districts, where the lands are frequently held in large estates, whose owners employ a good deal of labour. Not only is this the case in many parts of the colony, but there is also a want of land where the sons of settlers can obtain farms, not far from the homes of their parents. To meet this want the Hon. J. McKenzie, the present Minister of Lands, introduced into the Legislature in the session of 1892 a Bill intituled "The Land for Settlements Act," which authorised the purchase from private individuals of suitable properties for subdivision into small farms not exceeding 320 acres in extent. Under the provisions of this and the amending Acts several properties have been acquired, and subsequently divided into small farms and leased in perpetuity at a 5-per-cent. rental, on a capital value fixed at a sufficient rate to cover first cost, together with survey, administration, and roads (if required). The process of acquisition is as follows: Whenever a property is offered to the Government, if it is so situated as to meet the object of the Act, a report on it is obtained by a qualified Government officer, and, should his report be favourable, the question of purchase is then referred to a Board of Land Purchase Commissioners, composed of the Inspector, who is the permanent Chairman, three other Government officers, and a member of the local Land Board, whose training and duties qualify them to advise the Government as to whether the purchase is a suitable one, and as to the price which should be given for the property. It is only on the advice of this Board that the Government acts. In nearly all cases the properties acquired have been improved farms, situated in settled districts, where the tenants have some chance of obtaining employment in the vicinity. The amount which may be expended per annum under the Act of 1892 was £50,000; but the Act of 1894 extended this amount to £250,000, and it also provided that the limit of land which might be selected should be the same as under "The Land Act, 1892." The Act also provides for the exchange of high-lying pastoral Crown lands for low-lying agricultural lands suitable for small holdings.

A new feature was introduced into the Act of 1894—namely, the power of taking lands compulsorily in cases where the Board could not agree with the owner as to price, &c., and where the Governor in Council decides that the possession of the land for purposes of subdivision is otherwise desirable. The amount payable to the owner is decided by a Compensation Court, composed of a

Judge of the Supreme Court and two Assessors; one appointed by Government, the other by the owner of the property. Only one property has hitherto been acquired compulsorily, and that has since been disposed of on satisfactory terms. Up to the 31st March, 1897, thirty-three estates had been purchased and offered for selection, at a cost of £471,960, including roading, surveys, &c., which covered an area of 95,348 acres. At the same date there were living on those estates which had been subdivided and selected 1,051 persons, in place of the few who held those lands formerly. The whole of these estates at the date given, in some cases, had not been selected, but the farms leased were bringing in a rental of 4·98 per cent. on the capital sunk in them. This extension of the provisions of the previous Act should prove beneficial in providing homes for a large class of persons, who, from inexperience in the breaking in of new country or other reasons, are in a measure prohibited from occupying the waste lands of the Crown; and, moreover, as the properties acquired are all more or less improved, they seem to afford to the small-farmer class of the Old Country an opening for building up homes for themselves where their previous experience will be of use, instead of having to learn—often by sad experience—the methods adapted to a new and wild country.

"The Land for Settlements Act Amendment Act, 1896," contains special provisions as to the disposal of lands acquired under "The Land for Settlements Act, 1894," giving the preference to landless people, and requiring applicants for rural land to satisfy the Land Board as to their means to stock and cultivate the same and erect suitable buildings thereon. It gives the Board, in fact, a discretion as to who shall be entitled to apply for the lands. It also provides, in cases where buildings are on the land to be disposed of, that their value, apart from the capital value of the land, shall, with interest thereon at the rate of 5 per cent. per annum, be paid by the tenant in half-yearly instalments extending over a term of years.

There are also regulations as to advances by Government, to successful applicants for allotments, in aid of the cost of fencing and planting the same and building dwelling-houses thereon, and special provisions as to allotments for workmen's homes, the area of which should not in any case exceed 3 acres.

Regulations giving full directions to applicants under this Act have been issued during the past year, which should be in the hands of every one before applying for lands under this Act.

Village-homestead Settlements.

By J. E. March, Superintendent.

The plan of forming village settlements was first commenced in the Provincial District of Canterbury by the Hon. Mr. Rolleston. It was on a small scale, but it worked admirably. In 1874 and 1875 there was a difficulty in finding quarters or employment for immi-

grants, who had arrived in Canterbury in considerable numbers, and it was decided to try the experiment of settling them on the land in districts where they were likely to obtain work. The course adopted was briefly as follows: On the line of railway, or adjacent thereto, as at Rakaia, Orari, and Arowhenua, blocks of Government land were laid off into sections varying in area from one-quarter to five acres. Assistance was given to the extent of £10 towards the erection of a small hut or cottage. The terms of occupation were as follows: For the first year, rent free; and for the second and third years a rental of 2s. per week was charged, to recoup the Treasury the amount advanced.

In the formation of some of these settlements, notably at Geraldine, Timaru, and Waimate, the idea was not to permanently locate the immigrants, on whose behalf the plan had been adopted, but merely allow them to occupy the land temporarily; and it was considered that in three years they would be enabled to find situations or places elsewhere. All traces of the settlements formed in the localities named have long since disappeared.

The land comprised in the village settlements formed at Rakaia, Arowhenua, Beaconsfield, and other districts in Canterbury was sold to the original settlers on the deferred-payment system.

From 1876 to 1886, a period of ten years, very little was done in extending the system, but in the latter year the late Hon. Mr. Ballance, then Minister of Lands, introduced regulations for the formation of village-homestead special settlements. These were of a liberal character; and the assistance granted by way of loans for dwelling-houses, bush-felling, grassing, &c., enabled an industrious man to make and establish a comfortable home, while he was precluded from parting with the freehold.

A large number of settlements were thus formed, and, generally speaking, the settlers and their families have comfortable homes, and look healthy and contented; the financial results prove conclusively that the settlements are successful.

The number of village-homestead settlements now in the colony is 158. Of these, 51 are situated in the North Island and 107 in the Middle Island. The settlers number 1,543. The total acreage held is 35,247 acres: of this, 15,719 acres are in the North Island, and 19,528 acres in the Middle Island. The average area to each settler is 22¾ acres. Up to the end of March last the settlers had repaid the Government £1,911 of the amount advanced for cottages, bush-felling, &c., leaving £23,938 outstanding. The annual rent and interest is £4,904; and during the past year £4,905 14s. 10d. was received. The settlers have paid for rent and interest from the commencement of the system and up to the 31st March, 1897, £27,014: namely, rent, £20,806; and interest, £6,208. Of this amount, £11,834 was paid by settlers in the North Island, and £15,180 by settlers in the Middle Island. The arrears of rent and interest on the 31st March last amounted to £1,820. The improvements made by the settlers on the land are valued at £109,529.

Purchase of Native Lands by Government.

From about the year 1823 (which is the date of the first recorded deed) until the 6th February, 1840, the date of the Treaty of Waitangi, lands in New Zealand were acquired by direct purchase from the Maoris by individual members of the white races. During the years 1837 to 1839, or about the time it became probable that the sovereignty of the islands would be assumed by the Queen, the greater number of these purchases were made, and they extended to most parts of the country. These purchases are technically known as "the Old Land Claims," and their total number (including pre-emptive claims), as estimated by Commissioner F. Dillon Bell in 1862, was 1,376, covering an area of about 10,322,453 acres, out of which large area grants were recommended for 292,475 acres. These figures have been slightly added to since, but not to any very large extent. The large area shown above was reduced on survey to about 474,000 acres, situated principally to the north of Auckland. The difference between the amount granted and the total area surveyed became what are termed "surplus lands of the Crown." It was held that the Native title had been fully extinguished over the whole area surveyed; but, as by statute the claimants could only be granted 2,560 acres each, the balance became vested in the Crown on the assumption of the sovereignty, the Native title having been fully extinguished.

In many cases the titles did not issue to those to whom the land was awarded, as they were compensated by scrip issued by the Government, with the understanding that such scrip was to be exercised in the purchase of Crown lands in the neighbourhood of Auckland, to which place it was desirable—so soon as the capital was founded—to draw a population. The lands thus paid for in scrip became Crown lands, and these, together with the surplus lands, have from time to time been disposed of by the Crown and settled on. The amount of scrip, &c., issued up to 1862 was over £109,000.

On the signing of the Treaty of Waitangi on the 6th February, 1840, the pre-emptive right of purchase from the Maoris was ceded to the Queen, and consequently private purchase ceased. This remained the law until the passing of "The Native Land Act, 1862," when the Crown relinquished its right of pre-emption, whilst at the same time the purchase of Native lands for the Crown did not abate, but continued side by side with the private purchases up to the passing of "The Native Land Court Act, 1894."

From time to time since 1840 various sums were appropriated by Government or by Parliament for the acquisition of a Crown estate. Up to the date of passing of "The Native Land Act, 1862," these operations were conducted by officers of the Government specially appointed, who, from a knowledge of the Maoris, their customs and disposition, were successful in securing large areas of land

for settlement. It must be conceded that their operations as a whole were successful, and that the number of disputed cases arising out of their labours was exceedingly small. The Waitara purchase is, however, here excluded, for there were reasons of general policy affecting that sale which did not prevail in other cases. This purchase was the ostensible cause of the war of 1860 and following years, but the motives which led to it were far deeper than the mere purchase of a few acres—there was a great principle at stake.

The difference effected in the mode of purchase by "The Native Land Act, 1862," was this: Previously, the title of the Maoris who were to receive payment for the land was decided by the Land Purchase officers; but the Act quoted set up a Court, presided over by able Judges, who determined the titles, which were afterwards registered in a special Court. Purchases have since been effected with the registered owners.

It is difficult to obtain figures showing the actual area acquired by the Crown from the Maoris up to 1870, but in round numbers it was 6,000,000 acres in the North Island; whilst the whole of the Middle Island, with the exception of reserves for the original Native owners, was acquired prior to the passing of "The Native Land Act, 1862." Stewart Island was purchased from the Native owners by deed dated 29th June, 1864.

The Native rebellion of 1860–69 brought Native-land purchases, for the time being, practically to a standstill.

The Immigration and Public Works Acts of 1870 and 1873 appropriated £200,000 and £500,000, respectively, for the purchase of lands in the North Island; and these amounts have, up to the 31st of March, 1897, been augmented by further annual appropriations from the public funds and other loan-moneys, covering altogether a total expenditure since 1870 of £1,789,796, with the following results: Area finally acquired in the North Island from Natives, from 1870 to 31st March, 1897, 6,735,433 acres. Area under negotiation in the North Island on 31st March, 1897, 1,541,879 acres; interests therein finally acquired, 613,778 acres.

Digest of the Land-Laws.

Administration.

The Crown lands are administered, under the authority of "The Land Act, 1892," by the Hon. the Minister of Lands at Wellington. For convenience the colony is divided into ten land districts, each being under the local direction of a Commissioner and a Land Board. The Commissioner's office is known as the principal land office, and in some of the larger districts there are one or more sub-offices. It is with these land offices the selector has to transact all business, from the first consultation of the maps to the final receipt of the Crown title.

Land Districts and Principal Land Offices.

The names of the land districts and of the towns where each principal office is situated are, beginning with the most northerly and taking them geographically, as under:—

Land District.	Town where Principal Land Office is situated.	Land District.	Town where Principal Land Office is situated.
Auckland	Auckland.	Marlborough	Blenheim.
Taranaki	New Plymouth.	Westland	Hokitika.
Hawke's Bay	Napier.	Canterbury	Christchurch.
Wellington	Wellington.	Otago	Dunedin.
Nelson	Nelson.	Southland	Invercargill.

Classification of Lands, &c.

Crown Lands are divided into three classes:—

(1.) Town and village lands, the upset prices of which are, respectively, not less than £20 and £3 per acre; such lands are sold by auction:

(2.) Suburban lands, the upset price of which may not be less than £2 an acre; these lands are also sold at auction:

(3.) Rural lands, which may be disposed of at not less than £1 per acre for first-class, and 5s. an acre for second-class lands; such lands may be sold or leased by auction, or sold or leased on application.

No rural section may be larger than 640 acres in extent if first-class land, or 2,000 acres if second-class land, whether offered by auction or application. No person can select more than 640 acres of first-class or 2,000 acres of second-class land, including therein any land which he then holds. Pastoral runs are limited to areas which will carry 20,000 sheep or 4,000 cattle. No person can select more than one run.

Mode of acquiring Crown Lands.

Crown Lands may be acquired as follows:—

(1.) By auction, after survey, in which case one-fifth of the price is paid down at the time of sale, the balance within thirty days:

(2.) By application, after the lands have been notified as open for selection, in which case the applicant fills up a form (to be obtained at any of the Land Offices) and makes the declaration and deposit required by the particular system he wishes to select under.

All applications, whether for surveyed or unsurveyed lands, are deemed to be simultaneous if made on the same day, and, if there be more than one applicant for the same land, the right of selection is determined by ballot.

Lands thrown open for application may be either surveyed or unsurveyed, and those not selected the first day remain open.

The Optional System of Selection.

Lands for selection are notified as open for application on and after a stated day, and, *at the option of the applicant*, may be obtained on any of the three following tenures: (*a*) Cash; (*b*) Occupation with the right of purchase; (*c*) Lease in perpetuity.

(*a.*) *Cash.*

If the land is surveyed, one-fifth of the price is to be paid down at the time of application, and the balance within thirty days; or, if the land is not completely surveyed, the survey-fee is paid on application, and goes towards the purchase of the land; the balance must be paid within thirty days of notice that the survey is completed.

A certificate of occupation will issue to the purchaser on final payment, which will be exchanged for a Crown title so soon as the Board is satisfied that the improvements mentioned below have been completed.

(*b.*) *Occupation with Right of Purchase.*

Lands selected on this tenure are held under a license for twenty-five years. At any time subsequent to the first ten years, and after having resided and made the improvements hereinafter described, the licensee can, on payment of the upset price of the land, acquire the freehold. If the land be not purchased, the license may be exchanged for a lease in perpetuity.

The rent is 5 per cent. on the cash price of the land; a half-year's rent has to be paid in with the application, if surveyed land, which represents the half-year's rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the cost of survey is to be deposited, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey.

Residence and improvement of the land are compulsory, as hereinafter described.

(*c.*) *Leases in Perpetuity.*

Lands selected on this tenure are leased for 999 years, subject to the conditions of residence and improvements described below. The rental is 4 per cent. on the cash price of the land, and applications are dealt with in the same way as under the previous tenure (*b*), but there is at no time a right of purchase.

Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures.

Residence and Improvements.

Under the two last-mentioned tenures, the conditions as to residence and improvements are:—

RESIDENCE—

(1.) Must commence on bush or swamp lands within four

years, and in open or partly open land within one year, from the date of selection:

(2.) Must be continuous for six years on bush or swamp land, and for seven years on open or partly open land, on lands occupied with a right of purchase:

(3.) Must be continuous for a term of ten years on lease-in-perpetuity lands.

The Board has power to dispense with residence in certain cases, such as where the selector is residing on adjacent lands, or is a youth or unmarried woman living with parents, and in a few other cases.

RESIDENCE implies the erection of a habitable house to be approved of by the Board.

IMPROVEMENTS which must be made are as follows:—

(1.) Cash-tenure lands must be improved within seven years to an amount of £1 an acre for first-class land, and 10s. an acre for second-class land.

(2.) Lands held on lease with right of purchase, or on lease in perpetuity, must be improved to an amount equal to 10 per cent. of the value of the land within one year from the date of the license or lease; within two years must be improved to the amount of another 10 per cent.; within six years must be improved to the value of another 10 per cent., making 30 per cent. in all within the six years. In addition to the above, the land must be further improved to an amount of £1 an acre for first-class land, and on second-class land to an amount equal to the net price of the land, but not more than 10s. an acre.

Improvements may consist of reclamation from swamps, clearing of bush, planting with trees or hedges, cultivation of gardens, fencing, draining, making roads, wells, water-tanks, water-races, sheep-dips, embankments or protective-works, or in any way improving the character or fertility of the soil; or the erection of any building, &c.; and *cultivation* includes the clearing of land for cropping, or clearing and ploughing for laying down with artificial grasses, &c.

Special-settlement Associations.

Under the existing regulations any number of persons, not less than twelve, may apply for a block of land of not less than 1,000 acres or more than 11,000 acres in extent, but the number of members must be such that there shall be one for every two hundred acres in the block, and no one can hold more than 320 acres, except in swamp lands, where the area may be 500 acres.

The capital value of lands within a special settlement is fixed after survey by special valuation, but may not be less than 10s. an acre; the rental is not less than 4 per cent. on the capital value, and the tenure is a lease in perpetuity.

Residence, occupation, and improvements are generally the same as already described, and applications have to be made in manner prescribed by regulations.

Applicants should apply to a Commissioner for a copy of the regulations, as they are liable to change at any time.

Improved-farm Settlements.

Special regulations are in force for this class of settlement, which should be applied for, but briefly the terms are as follows: Those who form settlements under these provisions are selected from the applicants by the Commissioner of Crown Lands, preference being given to married men. The areas of the farms may vary from 10 acres to 200 acres, according to locality; no settler can select more than one farm. The land is leased for 999 years at a rental of 4 per cent. on the capital value, to which is added 5 per cent. on the amount advanced by Government for clearing, grassing, &c. The rates allowed for felling are those current in the district, but must not exceed £1 15s. per acre. Advances to cover cost of sowing with grass will be made, if required, likewise not more than £10 towards building a house or erecting fencing. Not more than 100 acres of felling will, however, be paid for. As a rule, the settlers can get employment on the road-works in the neighbourhood, but Government does not guarantee this.

Residence for the first ten years is compulsory, and improvements must be made in terms of Part III. of "The Land Act, 1892." (See *ante*.)

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follows:—

Such settlements may be divided into:—

(1.) Village allotments not exceeding one acre each, which are disposed of either by auction among the applicants or by application, as already described, with option of tenure, the cash price being not less than £3 per allotment:

(2.) Homestead allotments not exceeding 100 acres each, which are leased in perpetuity at a 4-per cent. rental on a capital value of not less than 10s. per acre.

Residence, improvements, and applications are the same as already described. The leases are exempt from liability to be seized or sold for debt or bankruptcy.

The Colonial Treasurer is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Small Grazing-runs.

Small grazing-runs are divided into two classes: First-class, not exceeding 5,000 acres; second-class, not exceeding 20,000 acres in area. The rental in both cases is not less than 2½ per

cent. on the capital value per acre, but such capital value cannot be less than 5s. per acre. Small grazing-runs are leased for terms of twenty-one years, with right of renewal for other twenty-one years, at a rent of 2½ per cent. on the then value of the land. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Land Office, together with the deposit of one half-year's rent, which represents that due on the 1st day of March or September following the selection.

No holder of a pastoral run, and no holder of freehold or leasehold land of any kind whatever, over 1,000 acres in area, exclusive of the small grazing-run applied for, may be a selector under this system; and only one small grazing-run can be held by any one person.

The lease entitles the holder to the grazing rights, and to the cultivation of any part of the run, and to the reservation of 150 acres round his homestead through which no road may be taken; but the runs are subject to the mining laws.

Residence is compulsory, if bush or swamp land, within three years; if open, within one year; and must be continuous to the end of the term, but may in a few cases be relaxed. Improvements necessary are as follows: Within the first year, to the amount of one year's rent; within the second year, to another year's rent; and, within six years, to the value of two other years' rent: making in all a sum equal to four years' rental, which must be expended within six years. In addition to these improvements, bush-covered first-class runs must be improved to an amount of 10s. an acre, and second-class bush-clad runs to an amount of 5s. an acre.

These runs may be divided, after three years' compliance with the conditions, amongst the members of the selector's family.

Pastoral Runs.

Pastoral country is let by auction for varying terms not exceeding twenty-one years; and, excepting in extraordinary circumstances, runs must not be of a greater extent than will carry 20,000 sheep or 4,000 head of cattle. Runs are classified from time to time by special Commissioners into: (1) Pastoral lands, which are suitable only for depasturing more than 5,000 sheep; (2) pastoral-agricultural lands, suitable for subdivision into areas of under 5,000 acres, which may be either let as pastoral runs, generally for short terms, or cut up for settlement in some other form. Leases of pastoral lands may not be resumed; leases of pastoral-agricultural lands may be resumed at any time after twelve months' notice, without compensation.

No one can hold more than one run; but, in case of any one holding a run of a carrying-capacity less than 10,000 sheep, he may take up additional country up to that limit.

Runs are offered at auction from time to time, and half a year's rent has to be paid down at the time of sale, being the amount

due in advance on the 1st day of March or September following the sale, and the purchaser has to make the declaration required by the Act. All leases begin on the 1st day of March, and they entitle the holder to the grazing rights, but not to the soil, timber, or minerals; and the lease terminates over any part of the run which may be leased for some other purpose, purchased, or reserved. The tenant has to prevent the burning of timber or bush; in open country to prevent the growth of gorse, broom, or sweetbriar; and to destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years.

In case it is determined again to lease any run on expiry of the lease, the new lease must be offered by auction twelve months before the end of the term, and if, on leasing, it shall be purchased by some one other than the previous lessee, valuation for improvements, to be made by an appraiser, shall be paid by the incoming tenant, but to a value not greater than three times the annual rent—excepting in the case of a rabbit-proof fence, which is to be valued separately. If the run is not again leased, the value of rabbit-proof fencing is paid by the Crown, but the tenant has no claim against the Crown beyond the value of the rabbit-proof fence; he may, however, within three months of sale, remove fences, buildings, &c. Runs may also be divided with the approval of the Board.

Survey Charges on Unsurveyed Lands.

The following is the scale of charges for surveys of unsurveyed lands:—

Not exceeding 30 acres, £6.

Exceeding 30 and up to 50 acres, 3s. 6d. per acre, but not less than £6.

Exceeding 50 and up to 100 acres, 3s. per acre, but not less than £8 15s.

Exceeding 100 and up to 200 acres, 2s. 6d. per acre, but not less than £15.

Exceeding 200 and up to 300 acres, 2s. per acre, but not less than £25.

Exceeding 300 and up to 500 acres, 1s. 8d. per acre, but not less than £30.

Exceeding 500 and up to 1,000 acres, 1s. 4d. per acre, but not less than £41 10s.

Exceeding 1,000 and up to 2,000 acres, 1s. per acre, but not less than £66 10s.

For the survey of any area of rural land, being open land, the scale of charges shall be two-thirds the foregoing rates.

ADVANCES TO SETTLERS.

THE Government Advances to Settlers Act was a Government policy measure in the legislation of 1894. It was designed to afford relief to a numerous class of colonists who were struggling under the burden of high rates of interest and heavy legal expenses of mortgages. These were established when prices of agricultural produce were high and profits large; and, so long as business continued to be prosperous, they attracted but little, if any, attention. For several years preceding 1894 commerce and agriculture had suffered from world-wide depression; settlers were becoming embarrassed in their circumstances; and the high rates of interest still charged were felt to be a burden on the industry of the people not easily borne, and a hindrance to the settlement and development of the farming lands of the colony. In these circumstances the Government brought in the Government Advances to Settlers Act. It was passed towards the close of the session of 1894, and immediately came into operation, with results which have proved beneficial to the farming community. A general decline in the rates of interest at once set in, and it is not too much to claim that the Act has been a measure instrumental in lowering the interest charged on several millions of borrowed money, and which, though it may have diminished the incomes of a few persons in the colony, has ameliorated the circumstances of many, and enabled thousands of acres to be brought under cultivation much sooner than might otherwise have been the case.

The Act authorised the raising of three million pounds sterling within two years, in sums of a million and a-half per annum, at a rate of interest not higher than 4 per cent. In May, 1895, tenders were invited in London for £1,500,000 of 3-per-cent. inscribed stock of the Government of New Zealand, and applications were received for £5,960,400 at prices ranging from £100 to £90. The million and a-half was placed at an average price of £94 8s. 9d.

An amending Act, passed in 1895, extended the time for raising the residue of the three millions to three years from the coming into operation of the amending Act.

To carry out the objects of the Act, an office was established called the "Government Advances to Settlers Office"; at the same time a General Board was constituted to co-operate with and assist the Superintendent, the title by which the chief administrative officer is known.

The business of the Advances to Settlers Office is the lending of money on the security of first mortgages of land, provided the lands are occupied for farming, dairying, or market-gardening purposes. Urban and suburban lands used for residential or manufacturing purposes are excluded from the scope of

the Act. The titles which are eligible for advances are classified as follows:—

(1.) Freehold land held in fee-simple under "The Land Transfer Act, 1885," or freehold land held in fee-simple the title to which is registered under "The Deeds Registration Act, 1868."

(2.) Crown land held on perpetual lease under "The Land Act, 1885."

(3.) Crown land held under Parts III. and IV. of "The Land Act, 1892," including land held under occupation-with-right-of-purchase tenure.

(4.) Crown land held on lease as a small grazing-run under "The Land Act, 1885," or under "The Land Act, 1892."

(5.) Crown land held on agricultural lease under "The Mining Act, 1891."

(6.) Crown land held on lease (not being for mining purposes) under "The Westland and Nelson Coalfields Administration Act, 1877."

(7.) Native land held on lease under "The West Coast Settlement Reserves Act, 1892"; or

(8.) Land held on lease under "The Westland and Nelson Native Reserves Act, 1887."

(9.) Land held under "The Thermal-Springs Districts Act, 1881."

(10.) Educational and other reserves which are subject to the provisions of "The Land Act 1877 Amendment Act, 1882," by virtue of Proclamation made under section 50 thereof, or "The Land Act, 1885," by virtue of Proclamation made under section 237 thereof; or "The Land Act, 1892," by virtue of Proclamation made under section 243 thereof, and are held on perpetual lease or lease in perpetuity, or on deferred-payment or small grazing-run systems.

(11.) Crown land held by license on the deferred-payment system under Part III. of "The Land Act, 1885."

(12.) Land held under lease from a leasing authority, as defined by "The Public Bodies' Powers Act, 1887," and providing for the payment by the incoming tenant of valuation for improvements made upon the land, whether by the lessee named in such lease or any former lessee or tenant.

Of these classes, Nos. 10, 11, and 12 were added by amending Acts passed in 1895 and 1896.

Applicants for loans are required to apply on a form prescribed by regulation under the Act, and to pay a valuation-fee in accordance with the following scale:—

	£	s.	d.
On an application for a loan not exceeding £100 ..	0	10	6
Exceeding £100 but not exceeding £250	1	1	0
Exceeding £250 but not exceeding £500	1	11	6
Exceeding £500 but not exceeding £3,000	2	2	0

Valuations of the securities offered are made on behalf of the Department by expert land-valuers; and these valuations, together with the corresponding land-tax valuations, and reports from the Commissioners of Crown Lands in the cases of Crown leaseholds, are considered by the General Board. Board meetings are held weekly, or as occasion requires, and the Superintendent is bound by the resolutions of the Board. A resolution is taken with regard to every application placed before the General Board, so that on the Board rests the responsibility of granting loans or of refusing to grant them.

Some applicants offer securities which are obviously not eligible; and in that event the valuation-fees paid are returned, the securities are not valued, and the applications do not go before the Board.

The Act of 1894 contemplated loans of one class only—namely, loans on mortgages repayable by 73 half-yearly instalments, subject, however, to provisions for paying off the loan at any time—but the amending Act of 1896 added what are known as "fixed loans." Fixed loans are authorised to be made on freehold lands only, and may be for any term not exceeding ten years. They are repayable, without sinking fund, at the end of the term for which they are granted. They must not exceed in amount one-half of the estimated value of the security, and they bear interest, like instalment loans, at the rate of 5 per cent. per annum.

Under the instalment system the Board has power to advance up to 60 per cent. of the estimated realisable value of freehold securities, and up to 50 per cent. of the lessee's interest in the case of leasehold securities.

Loans must not be for a less amount than £25, nor a greater amount than £3,000. The maximum limit was £2,500 under the 1894 Act, but the amending Act of 1896 raised it to £3,000.

Instalment mortgages are repayable (principal and interest) in thirty-six and a half years, by half-yearly payments at the rate of 5 per cent. interest and 1 per cent. principal per annum on the amount advanced. Excepting the last, the instalments do not vary in amount; but inasmuch as every payment reduces the amount of the principal owing, so the interest charge becomes less every six months, and an ever-increasing proportion of the instalment is available for paying off the principal. The following table shows how a loan of £100 is paid off in thirty-six and a half years by six-monthly instalments of £3, and how much of the principal remains to be paid at any given period.

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS FOR EVERY ONE HUNDRED POUNDS OF THE LOAN.

Half-year.	Prescribed Half-yearly Instalment.	Apportioned thus:		Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st	3 0 0	2 10 0	0 10 0	99 10 0
2nd	3 0 0	2 9 9	0 10 3	98 19 9
3rd	3 0 0	2 9 6	0 10 6	98 9 3
4th	3 0 0	2 9 3	0 10 9	97 18 6
5th	3 0 0	2 9 0	0 11 0	97 7 6
6th	3 0 0	2 8 8	0 11 4	96 16 2
7th	3 0 0	2 8 5	0 11 7	96 4 7
8th	3 0 0	2 8 1	0 11 11	95 12 8
9th	3 0 0	2 7 10	0 12 2	95 0 6
10th	3 0 0	2 7 6	0 12 6	94 8 0
11th	3 0 0	2 7 2	0 12 10	93 15 2
12th	3 0 0	2 6 11	0 13 1	93 2 1
13th	3 0 0	2 6 7	0 13 5	92 8 8
14th	3 0 0	2 6 3	0 13 9	91 14 11
15th	3 0 0	2 5 10	0 14 2	91 0 9
16th	3 0 0	2 5 6	0 14 6	90 6 3
17th	3 0 0	2 5 2	0 14 10	89 11 5
18th	3 0 0	2 4 9	0 15 3	88 16 2
19th	3 0 0	2 4 5	0 15 7	88 0 7
20th	3 0 0	2 4 0	0 16 0	87 4 7
21st	3 0 0	2 3 7	0 16 5	86 8 2
22nd	3 0 0	2 3 2	0 16 10	85 11 4
23rd	3 0 0	2 2 9	0 17 3	84 14 1
24th	3 0 0	2 2 4	0 17 8	83 16 5
25th	3 0 0	2 1 11	0 18 1	82 18 4
26th	3 0 0	2 1 6	0 18 6	81 19 10
27th	3 0 0	2 1 0	0 19 0	81 0 10
28th	3 0 0	2 0 6	0 19 6	80 1 4
29th	3 0 0	2 0 0	1 0 0	79 1 4
30th	3 0 0	1 19 6	1 0 6	78 0 10
31st	3 0 0	1 19 0	1 1 0	76 19 10
32nd	3 0 0	1 18 6	1 1 6	75 18 4
33rd	3 0 0	1 18 0	1 2 0	74 16 4
34th	3 0 0	1 17 5	1 2 7	73 13 9
35th	3 0 0	1 16 10	1 3 2	72 10 7
36th	3 0 0	1 16 3	1 3 9	71 6 10
37th	3 0 0	1 15 8	1 4 4	70 2 6
38th	3 0 0	1 15 1	1 4 11	68 17 7
39th	3 0 0	1 14 5	1 5 7	67 12 0
40th	3 0 0	1 13 10	1 6 2	66 5 10
41st	3 0 0	1 13 2	1 6 10	64 19 0
42nd	3 0 0	1 12 6	1 7 6	63 11 6
43rd	3 0 0	1 11 9	1 8 3	62 3 3
44th	3 0 0	1 11 1	1 8 11	60 14 4
45th	3 0 0	1 10 4	1 9 8	59 4 8
46th	3 0 0	1 9 7	1 10 5	57 14 3
47th	3 0 0	1 8 10	1 11 2	56 3 1
48th	3 0 0	1 8 1	1 11 11	54 11 2
49th	3 0 0	1 7 3	1 12 9	52 18 5
50th	3 0 0	1 6 6	1 13 6	51 4 11

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS FOR EVERY ONE HUNDRED POUNDS OF THE LOAN—*continued.*

Half-year.	Prescribed Half-yearly Instalment.	Apportioned thus:		Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
51st	3 0 0	1 5 8	1 14 4	49 10 7
52nd	3 0 0	1 4 9	1 15 3	47 15 4
53rd	3 0 0	1 3 11	1 16 1	45 19 3
54th	3 0 0	1 3 0	1 17 0	44 2 3
55th	3 0 0	1 2 1	1 17 11	42 4 4
56th	3 0 0	1 1 1	1 18 11	40 5 5
57th	3 0 0	1 0 2	1 19 10	38 5 7
58th	3 0 0	0 19 2	2 0 10	36 4 9
59th	3 0 0	0 18 1	2 1 11	34 2 10
60th	3 0 0	0 17 1	2 2 11	31 19 11
61st	3 0 0	0 16 0	2 4 0	29 15 11
62nd	3 0 0	0 14 11	2 5 1	27 10 10
63rd	3 0 0	0 13 9	2 6 3	25 4 7
64th	3 0 0	0 12 7	2 7 5	22 17 2
65th	3 0 0	0 11 5	2 8 7	20 8 7
66th	3 0 0	0 10 3	2 9 9	17 18 10
67th	3 0 0	0 9 0	2 11 0	15 7 10
68th	3 0 0	0 7 8	2 12 4	12 15 6
69th	3 0 0	0 6 5	2 13 7	10 1 11
70th	3 0 0	0 5 1	2 14 11	7 7 0
71st	3 0 0	0 3 8	2 16 4	4 10 8
72nd	3 0 0	0 2 4	2 17 8	1 13 0
73rd	1 13 10	0 0 10	1 13 0	..

Under the system of instalment-mortgages borrowers may pay off the whole balance of principal and interest owing at any time, and obtain a discharge; or they may pay to the Superintendent in reduction of the mortgage debt any sum not less than £5 or a multiple of £5. Payments made in reduction of these loans are treated as deposits, bearing interest at 4 per cent., compounded annually. When deposits with accumulated interest amount to a sum equal to the unpaid balance of the loan, the mortgagor may obtain a discharge of the mortgage on payment of the prescribed release-fee. So long as deposits, with interest added, amount to less than the balance of principal owing, instalments on the original amount of the loan continue to be payable. In the case of fixed loans, payments of £5, or a multiple of £5, may be made in reduction of the loans at the due date of any half-yearly payment of interest, and thenceforth interest is payable only on so much of the loan as remains unpaid.

The following is the scale of costs and fees for mortgages fixed by the Regulations under the Act:—

Mortgages under "The Land Transfer Act, 1895."

Law-costs of preparing, or perusing, and of registering mortgage (to be deducted from the advance),—

	£	s.	d.
If advance be not exceeding £500	0	10	6
Exceeding £500, but not exceeding £1,000	1	1	0
Exceeding £1,000, but not exceeding £3,000 ..	1	11	6

With cash disbursements, which are the same in every case, namely,—

Mortgage form	2s.	
Search-fee	2s.	With an additional 2s. for every certificate of title after the first.
Registration	10s.	

Costs and fees for discharge of mortgage,—

Release fee	5s.	With an additional 2s. for registration of every additional certificate after the first.
Registration fee	5s.	

Mortgages under "The Deeds Registration Act, 1868."

Costs of preparing, or perusing, and of registering mortgage, including disbursements (to be deducted from the advance),—

	£	s.	d.
If advance be not exceeding £500	2	10	0
For every additional £500	0	15	0
Costs of discharge, including registration fees ..	1	1	0

Solicitors are entitled to charge moderately for any services mortgagors may require over and above those for which the above scale fixes the costs—such services, for example, as clearing encumbered titles.

By arrangements made with the Post Office, mortgagors are enabled to pay their instalments and interest to the credit of the Superintendent at any money-order office throughout the colony, and free of all costs for remitting the money to Wellington. This is an arrangement at once convenient and economical for the large number of persons scattered all over the colony who have financial dealings with the Advances to Settlers Office. Loans may also be repaid in full through the Post Office.

The officials of the Government Advances to Settlers Office are bound by declaration to observe secrecy respecting applications for advances, and are forbidden to give any information respecting the business of the Department except to officers appointed to assist in carrying out the provisions of the Act.

The Act provides penalties for persons employed in the business of the Advances to Settlers Office taking any fee or reward from an applicant for a loan under the Act; for persons acting as valuers of land in which they have a pecuniary interest; and for persons who may attempt to bribe any one employed under the Act. It should be understood that no commission, charge, or procuration fee is payable in connection with an application for a loan.

The amount of the million-and-a-half loan which is not immediately required for investment on mortgage is invested in easily-realisable temporary securities. These yield a little over 3½ per cent. interest, and are sold from time to time as funds are required.

The first meeting of the General Board for the purpose of considering applications for loans was held on 23rd February, 1895:

and up to the 31st March, 1897, the Board had authorised 4,501 advances, amounting to £1,404,065, and declined 1,112 applications for £360,268. The total amount applied for by the 4,501 applications granted in full and partially was £1,654,002. 581 applicants declined the partial grants offered to them, amounting to £291,290; so that the net advances authorised at 31st March, 1897, numbered 3,920, and amounted to £1,112,775. The security for the net authorised advances was valued at £2,566,756. The number of applications received up to 31st March, 1897, was 5,809, for an aggregate amount of £2,081,633. 65 per cent. of the total amount applied for was wanted for the purpose of paying off existing mortgages at rates of interest higher than 5 per cent. On the 31st July, 1897, the advances authorised to and accepted by applicants amounted to £1,254,040.

NEW ZEALAND CONSOLS.

THE purpose of "The New Zealand Consols Act, 1894," is, by providing for an inscription of such Consols, to give further facilities for the safe investment of savings. Practically, it establishes another branch of the Government Savings-Bank, with extended power of investment. Under section 3 the Colonial Treasurer is authorised to receive by way of deposits from persons in the colony sums of money up to £500,000; but the amount deposited in any one year must not be more than £250,000. The currency of such deposits is not to exceed forty years. The rate of interest must not exceed 4 per cent.

Post-office money-order offices throughout the colony are made use of to receive applications for inscription, and also for payment of the half-yearly interest on the amounts deposited. The Receivers are the Postmasters, and the Registrar under the Act is the Secretary to the Treasury, Wellington.

Regulations have been issued, under which every deposit of money for inscription is to be accompanied by an application according to the form given below, which is to be signed by the applicant and countersigned by the Receiver (Postmaster) taking the deposit. The person paying the money receives an interim receipt pending official acknowledgment from the Registrar at Wellington. The receipt subsequently given by the Registrar to the Consols-holder is not a negotiable document, or of monetary value, beyond its being proof of the deposit for purposes of inscription. A holder of Consols can obtain from the Registrar on application and payment of 5s. a certified copy of any entry in the register relating to his deposit.

There is provision for the transfer of Consols from one holder to another on application being made to the Registrar according to the second form given, and payment of 1s. fee.

In case an inscriber desires to make use of his deposit, or any portion of it, to the extent of £5, or a multiple of £5, he can obtain

a Consols certificate which is payable to bearer, and is transferable by delivery. This certificate entitles the holder to receive interest half-yearly at the same rate as the original inscription, and also to payment of the principal sum on the due date.

The application for the certificate must be according to the form appended, and the fee payable is 1s. for every one hundred pounds or aliquot part thereof expressed in the certificate. There is also a fee at the above rate for inscribing the amount of a Consols certificate. The form of Consols certificate is also given.

Interest on Consols for which no certificate has been issued is payable by warrant, and such warrants are transferable by indorsement in the manner provided in the form.

Interest on Consols for which a certificate has been issued is payable to the bearer of the certificate on presentation at any post-office money-order office, or at the Treasury, Wellington (see the last form).

The Act provides for the deposit of money by minors, which may be acceptable to parents as encouraging habits of thrift in children.

The Consols have a currency to the 1st February, 1910, and carry interest at the rate of three pounds ten shillings for every one hundred pounds deposited, and an assured investment of moneys bearing a fair rate of interest for so long a term should secure, when well known, a large portion of the deposits of our thrifty population.

Application for Inscription.

To the Registrar of Inscribed Consols,
Treasury, Wellington.

I [We], , of , having this day deposited at the sum of pounds shillings and pence, for investment in -per-cent. New Zealand Consols, hereby request that the same may be duly inscribed in the books of your office in the name of .

Signature of depositor:
Full address of depositor, together with name of nearest money-order office:

Dated at , this day of , 189 .

Deposit duly received as above.

Signature of Receiver: .

Application for Transfer.

In consideration of the sum of , the receipt whereof is hereby acknowledged, I [we], of do assign the sum of pounds shillings and pence, being my [our] interest or share in the New Zealand -per-cent. Inscribed Consols, under the "The New Zealand Consols Act, 1894," and all my [our] property, right, and interest in and to the same, and the dividends thereon, unto , of , his [their] executors. administrators, or assigns, and the Registrar is hereby requested to transfer the same accordingly. The prescribed fee of is enclosed herewith.

Witness my [our] hand , this day of , 189 .

Signature: .

Witnessed by—
Signature: .
Occupation: .
Address: .

I [We], of , do hereby accept the above Consols, and apply for the transfer thereof to me [us].

Signature: .

Witnessed by—
Signature: .

Application for Consols Certificate.

Place: .
Date: , 189 .

To the Registrar of Inscribed Consols,
Treasury, Wellington.

I [We], , of , being the holder of New Zealand Inscribed Consols to the amount of pounds shillings and pence, do hereby make application for a Consols certificate in favour of bearer for the sum of pounds, to be issued to me [us] in accordance with and subject to the provisions contained in "The New Zealand Consols Act, 1894." The prescribed fee of is enclosed herewith.

Signature:

Witness—
Signature: .
Occupation: .
Address: .

Consols Certificate.

No. . £ .

THE bearer of this certificate will be entitled to payment of the sum of pounds sterling upon presentation hereof at the Treasury at Wellington, New Zealand, on the day of , 19 , together with such interest, computed at the rate of sterling per centum per annum, as may be found to be unpaid on the before-mentioned date in accordance with the indorsements of interest-payments made hereon.

The principal and interest are a charge upon and shall be paid out of the accruing income of the Consolidated Fund of the colony.

Interest hereon at the rate of sterling per centum per annum is payable half-yearly, on the and in each year, at any post-office money-order office within the colony.

The amount of interest paid is to be indorsed on the back hereof by the person making such payment.

Dated at the office of the Registrar of Inscribed Consols, Wellington, , 189 .

, Registrar.

Countersigned—
, Controller and Auditor-General.

Entered, folio .

[On the back, indorsements of the half-yearly dividends paid by the Postmaster are to be duly made.]

Dividend Warrant.

To the Treasury at Wellington, or to the Postmaster at any post-office money-order office throughout the colony.

PLEASE pay or order the sum of pounds shillings and pence, being interest for half-year due , 189 , on £ -per-cent. New Zealand Consols.

£ : : . , Registrar.

I hereby acknowledge to have received the above-mentioned sum in full payment of interest for half-year due as above.

Signature

THE LAND-TAX AND INCOME-TAX.

The Land-tax.

At the time of the repeal of the Property Assessment Act in 1891 it was contended by many that the substitution of a land-tax, which exempted from taxation all the improvements on the land, and of an income-tax which exempted all private incomes up to £300 a year, would lead to such a shrinkage of revenue as to render the experiment exceedingly risky. After several collections of land-tax upon the unimproved value only, and an income-tax with the above exemption, it can now, however, be fairly admitted that such a contention has not been realised, and that the revenue, notwithstanding the many adverse circumstances attending the introduction of a new system of taxation, has been fully maintained.

The yield of land-tax for 1896–97 was, in round figures, £272,000, of which about £197,000 represents ordinary tax; the balance, £75,000, being graduated tax, and the special tax on absentee landowners. For the preceding year the total amount collected was almost exactly the same.

For the purposes of the "ordinary" land-tax, owners are allowed under the Act to deduct from the total unimproved value of their land the amount of any registered mortgage thereon, and the mortgagees are required to make a return of all their mortgages. In the case of uncompleted sales, where the title has not been transferred the amount of unpaid purchase-money is treated as a mortgage—that is, it may be deducted by the purchaser and must be included in the return made by the vendors.

An owner of land the unimproved value of which, together with mortgages owing to him, does not exceed £1,500 (after deducting mortgages owing by him) is allowed an exemption of £500, but where such value exceeds £1,500 the exemption diminishes by £1 for every £2 that such value increases, so that no exemption is allowable when £2,500 is reached.

The Act contains a provision that in cases where the income from any land or mortgages is less than £200 per annum, and the owner is incapacitated by age or infirmity from supplementing such income, a further exemption may be allowed by the Commissioner upon his being satisfied that the payment of the tax would entail hardship on such owner. This discretionary power has been exercised in a considerable number of instances, especially of widows and orphans with small means, and much hardship prevented.

All mortgages are assessed at their full nominal value, except where it is satisfactorily shown that owing to depreciation of the security or other cause such value has been diminished. In the case of mixed mortgages—that is, mortgages which cover land as well as security other than land—the amount of the mortgage chargeable with land-tax is taken to be the assessed value of the

land forming the security, the interest derived from the balance of mortgage being liable to income-tax.

It will be readily seen that the deductions and exemptions which have been referred to materially reduce the number of taxpayers as compared with the number of land-owners, the latter being upwards of 90,000, whilst the former only number about 13,000.

If the unimproved value of land in any assessment amounts to £5,000 or over, graduated tax is payable thereon according to the scale given on another page. Mortgages, however, are not chargeable with the graduated tax; but, on the other hand, no deduction is allowed in an assessment for graduated tax in respect of any mortgage owing on the land.

Twenty per cent. additional graduated tax is levied where the owners have been resident out of the colony for a period of three years or more prior to the date of the passing of the annual Tax Act.

Ordinary tax is payable on lands the property of Natives which are occupied by Europeans, it being considered that such lands, which have benefited equally with the lands of Europeans by the expenditure of public money, should bear some proportion of the taxation. But, recognising that in some instances, where the interests of the Native owners are small, the collection of the tax might possibly entail some hardship, the Legislature decided that only half the usual rate should be collected on such lands. Graduated tax is not chargeable on Native land.

During the session of 1896 the Government Valuation of Land Act was passed, providing for the periodical valuation of all landed properties in the colony. For the purposes of the Act it is provided that the colony shall be divided into special districts.

The first valuation under the Act is in progress, and will be completed on or before the 31st March, 1898. The purposes for which the valuations made under this Act are to be used are: Land-tax, local rates, stamp duties, and duties under the Deceased Persons' Estates Duties Act of 1881; for advances and investments on mortgage on land made by the Post Office, Government Insurance Department, Public Trust Office, Government Advances to Settlers Office, and the Commissioners of the Public Debts Sinking Funds. The valuation will also be used for the guidance of the Government for transactions under "The Land for Settlements Act, 1894," and "The Public Works Act, 1894."

Valuations will be supplied by the department on payment of the prescribed fee.

The general valuation-roll, when completed, will continue in force until a fresh roll is made, but whilst in force it may be altered and amended from time to time. The rolls will be supplied to local bodies by the Valuer-General. The aim is to insure a standard valuation for the purposes of local bodies, whilst the cost is expected to be less than when valuations were made separately by each local authority.

Upon the completion of the valuation, owners will have the right of objection, the procedure being that laid down by "The Rating Act, 1894."

The intention of the Act is that the valuation made thereunder shall be paid for by those using it, but it is premature yet to venture on any particulars either as to cost, or the proportion recoverable from the users. Very important statistical information is expected to be available when the valuation is completed.

THE INCOME-TAX.

Both the number of income-tax payers and the amount of tax received may appear at first sight smaller than might be expected from the population of New Zealand, but it should be remembered that all incomes from land and mortgages are exempt, the unimproved value of the former and the capital value of the latter being chargeable with land-tax. The statutory exemption of £300, *plus* life-insurance premiums up to £50, renders a very large number of employés and small traders exempt from the tax; and, as companies pay the tax on profits, dividends are not returnable by their shareholders. The omission of all incomes derived from rents, mortgages, the use and produce of land, explains both the smallness of the number subject to income-tax and, to a certain extent, the comparatively inconsiderable contribution to the revenue.

Objections to income assessments are heard in private before the Stipendiary Magistrate.

It would be impossible to indicate the number and variety of questions which arise daily in connection with income assessments, much less to give any intelligent account of how they are dealt with. The department has endeavoured to lay down certain definite rules for its guidance in the greater number of cases, and a memorandum embodying these has been circulated among all who have been called upon to make returns. It is, however, much too lengthy to introduce here.

Amongst the questions to which special attention has been given is that of the depreciation of plant and machinery, and the amount to be allowed as a deduction under this heading. The Amendment Act of 1894 admitted, amongst deductions, an allowance for depreciation of plant and machinery over and above what might be claimed as repairs and renewals. The allowance was, by law, fixed at "what might be considered just by the Commissioner," but the Chief Inspector of Machinery is, in this matter, the expert adviser of the department, and he fixes the rates to be allowed on the different classes of machinery. There were naturally some differences of opinion between owners of machinery and the department, but only in the case of steam-vessels has the Inspector found it necessary to alter the scale first laid down. The rule formulated for the Inspector's guidance was as follows:—

An allowance to be made of such an amount (over and above

what is expended in renewals and repairs) as will equal the annual loss of profit-earning power.

This is not intended to provide for the loss of capital invested, but simply represents the annual loss through wear and tear (as affecting income-earning capacity), other than that which can be made good by repairs.

Obsolete machinery is also allowed for when the machinery has been actually discarded; and here the amount to be allowed must bear the same proportion to the whole loss as the time the tax has been in operation bears to the life of the machine. An engine discarded in the third year of the tax—the life of the engine being, say, twenty years—would be allowed for to three-twentieths of the loss incurred, less the annual amounts that had been allowed for depreciation for those three years. Machinery superseded by something better, but kept in reserve in case of a breakdown, would not be allowed for.

The department has succeeded in reaching firms and companies which do business in the colony, but have neither premises, stock, nor any staff worth mentioning in New Zealand. By escaping the tax, such firms and companies were believed to have gained an advantage over their resident competitors. In order to comply with the law, the travelling agents or representatives of non-resident traders were asked, in the first instance, to make returns of all orders or business obtained by them. In consequence, however, of alleged difficulties in complying with this request, and at the suggestion of several representatives and principals, a fixed sum in lieu of income-tax was substituted, and was authorised by the Act of 1895. The amount was fixed at £50 by regulations issued thereunder.

During the year ending 31st March, 1897, ninety representatives of non-resident traders paid the license-fee, thus proving that the trade, which had in former years escaped taxation, whatever may be its volume, attracted many competitors.

It should be mentioned here that, as in the case of all companies, the statutory exemption of £300 is not allowed to absentees, whether firms or individuals.

Further regulations have been issued for levying income-tax on the profits earned by shipowners whose head-quarters are beyond the colony. The plan adopted is to require a return of the outward freight and passenger lists, and to levy tax at the rate of one shilling in the pound upon 5 per cent. of the total returned.

Yield of Tax.

The revenue collected during 1894–95 was £370,000, of which the land-tax contributed £279,000, and the income-tax £91,000. For 1895–96 the land-tax yielded £271,000, and the income-tax £94,000. For 1896–97 the yield of the land-tax was £272,000, and the income-tax £105,000.

Rates of Tax.

The rates of tax at present are: The ordinary land-tax is 1d. in the pound; the graduated tax commences at £5,000, at ⅛d. in the pound on the unimproved value, and rises to 2d. where the unimproved value of an owner's land is £210,000, or exceeds that sum. The tax on occupied Native land is ½d. in the pound on the unimproved value. The rate of income-tax is 6d. in the pound on the first taxable £1,000—that is, after deducting the £300 exemption—and 1s. in the pound on taxable incomes over £1,000. That is, a person having an income of £1,900 would be thus taxed: £300 would be exempted; £1,000 would pay 6d. in the pound; and the remaining £600, 1s. in the pound: making a total of £55 a year. The tax on an income of £400 would be at 6d. on £100, equal to £2 10s. Income-tax is levied on companies, and agents of absentee traders, at the rate of 1s. in the pound, and no exemption is allowed. The exemption is also disallowed in the case of persons not domiciled in New Zealand.

The schedule of rates of graduated land-tax is given below:—

Where the value is	£5,000 and is less than £10,000,	one-eighth of a penny in the pound sterling.
Where the value is	£10,000 and is less than £15,000,	two-eighths of a penny in the pound sterling.
Where the value is	£15,000 and is less than £20,000,	three-eighths of a penny in the pound sterling.
Where the value is	£20,000 and is less than £25,000,	four-eighths of a penny in the pound sterling.
Where the value is	£25,000 and is less than £30,000,	five-eighths of a penny in the pound sterling.
Where the value is	£30,000 and is ess than £40,000,	six-eighths of a penny in the pound sterling.
Where the value is	£40,000 and is less than £50,000,	seven-eighths of a penny in the pound sterling.
Where the value is	£50,000 and is less than £70,000,	one penny in the pound sterling.
Where the value is	£70,000 and is less than £90,000,	one penny and one eighth of a penny in the pound sterling.
Where the value is	£90,000 and is less than £110,000,	one penny and two-eighths of a penny in the pound sterling.
Where the value is	£110,000 and is less than £130,000,	one-penny and three-eighths of a penny in the pound sterling.
Where the value is	£130,000 and is less than £150,000,	one penny and four-eighths of a penny in the pound sterling.
Where the value is	£150,000 and is less than £170,000,	one penny and five-eighths of a penny in the pound sterling.
Where the value is	£170,000 and is less than £190,000,	one penny and six-eighths of a penny in the pound sterling.
Where the value is	£190,000 and is less than £210,000,	one penny and seven-eighths of a penny in the pound sterling.
Where the value is	£210,000 or exceeds that sum,	twopence in the pound sterling.

THE NEW ZEALAND GOVERNMENT LIFE INSURANCE DEPARTMENT.

THIS department, which has now been in existence for more than a quarter of a century, has proved a conspicuous success, whether contrasted with other Government institutions of a similar nature or with private companies, and the management is as vigorous, and the attractions of life insurance are as actively placed before the public, as with the most "go-ahead" private offices.

The department was founded with the express object of giving the New Zealand public the greatest benefits the premiums would provide, combined with absolute security for the fulfilment of the contracts; and, with this end in view, the policies issued by the department have been made as far as possible free from conditions, every reasonable privilege consistent with perfect safety being allowed: such as liberal surrender-values, freedom from restrictions in regard to occupation and place of residence, non-forfeiture of the policies so long as the surrender-value exceeds the arrears of premiums, interim bonuses, &c., while the profits are divided exclusively amongst the policy-holders.

During the year 1896, 4,026 proposals, for a total amount of £866,000, were received. Of the proposals submitted, 440 applications for an aggregate of £96,600 were deferred or declined. The following is a condensed summary of the department's new business transactions for the year:—

Class of Assurance.	No.	Sum assured.	Annual Premium.
		£	£
Whole-life and term assurances ..	813	200,258	5,362
Endowment assurances	1,360	251,941	9,361
Double-endowment assurances ..	569	145,100	4,433
Annuity assurances	49	5,850*	306
Children's endowments	29	2,837	153
	2,820	£605,986	19,615
Annuities	44	£1,915 per annum.	10†
Total policies	2,864	..	£19,625

* And deferred annuities securing £2,184 per annum.
† And single premiums amounting to £19,944.

The policies now in existence number 34,800, assuring the sum of £9,416,000, including bonus additions; £10,400 per annum, immediate annuities; and £6,700 per annum, deferred annuities.

During its existence the department has paid £1,961,600 to policy-holders or their representatives, and when it is considered that the adult male population of New Zealand ranged from about 83,000 in 1870 to 200,000 in 1896, it will be evident that the

institution has been fully appreciated by the public, and that it has been of material value in affording assistance to those who required it in time of need.

The funds of the department at the end of the year amounted to £2,591,000, and the care with which they have been invested will be evident from the fact that, although the interest revenue for the last triennium amounted to £359,500, only £760 was overdue at the end of the triennium. The growth of the revenue and funds for the last twelve years is shown by the following table:—

Triennial Period.	Revenue for the Triennium.	Funds at end of the Triennum.
	£	£
1885-87	765,000	1,328,000
1888-90	894,000	1,715,000
1891-93	1,035,000	2,129,000
1894-96	1,150,000	2,591,000

Owing to the general healthiness of New Zealand, and the care taken in accepting proposals for insurance, the mortality since the inception of the office has been extremely light, and has formed one of the chief sources of profit to policy-holders. The following table gives the sums assured (including bonus additions), and the amounts paid as death-claims during the last six years:—

Year.	Amount assured.	Death Claims.
	£	
1891	8,391,000	84,000
1892	8,581,000	84,000
1893	8,821,000	64,000
1894	9,233,000	89,000
1895	9,345,000	100,000
1896	9,416,000	88,000

The triennial investigation into the assets and liabilities of the office at the end of 1896 has recently been completed, and shows that the department occupies an exceptionally strong position, both in reference to its present finances and its future prospects. The total surplus of the triennium upon a 4 per cent. basis was £225,000; but of this amount £81,000 was specially reserved in order to enable the valuation basis to be still further strengthened in the near future. The effect of this special reserve is to place the department in a position to satisfy the requirements of a net premium valuation upon an interest basis of £3 12s. 6d. per cent., and the immediate and satisfactory result is, that not only are the present finances of the department strengthened, but its prospects of future prosperity are greatly improved. The large sum of £144,000, being the balance of the total surplus, was applied to

increase the policies in force by means of reversionary bonus additions amounting to £258,000.

The figures given below show the total cash profits that have been divided amongst the policy-holders during the existence of the office :—

—	No. of Years.	Cash Surplus divided.	Amount of Cash Surplus per Annum.
		£	£
First division of profits in 1880 ..	10½	56,000	5,300
Second " 1885 ..	5½	150,000	27,300
Third " 1890 ..	5	200,000	40,000
Fourth " 1893 ..	3	140,000	46,700
Fifth " 1896 ..	3	144,000	48,000
Total	27	690,000	25,600

The total cash surplus of £690,000, as shown above, has been applied to purchase reversionary bonus additions to policies, amounting to £1,375,000. The department divides the profits amongst its policy-holders every three years, and liberal bonuses are granted to all policies which become claims by death or maturity during a triennium ; so that the assured obtain practically the same benefits as if profits were divided annually, with the additional advantage that a very considerable saving is effected in expenses.

The latest revenue account and balance-sheet are given hereunder :—

REVENUE ACCOUNT OF THE GOVERNMENT LIFE INSURANCE DEPARTMENT FOR THE YEAR ENDED 31ST DECEMBER, 1896.

	£ s. d.		£ s. d.
Amount of Funds at 1st January, 1896	2,428,245 1 6	Death claims under policies, Assurance, including bonus additions	87,556 5 0
Renewal premiums—Assurance, Annuity, and Endowment	230,324 6 5	Endowment Assurances matured, including bonus additions	22,049 2 0
New premiums (including instalments of first year's premiums falling due in the year)	18,442 10 10	Endowments matured ...	1,053 7 4
Single premiums—Assurance and Endowment	2,009 2 2	Premiums returned on endowments	47 8 10
Consideration for annuities	19,943 10 7	Bonuses surrendered for cash	2,040 3 4
Interest	124,255 4 8	Annuities	9,694 18 3
Fees	9 18 0	Surrenders	17,332 14 6
		Loans released by surrender	26,595 3 1
		Commission— New ... £10,859 19 6 Renewal ... 1,643 7 2	12,503 6 8
		Land- and income-tax ...	7,565 16 10
		Expenses of management ...	34,949 3 3
		Reserve for possible depreciation in freehold and mortgage securities ...	10,500 0 0
		Amount of funds at 31st December, 1896	2,591,342 5 1
	£2,823,229 14 2		£2,823,229 14 2

BALANCE-SHEET OF THE GOVERNMENT LIFE INSURANCE DEPARTMENT ON 31ST DECEMBER, 1896.

Liabilities.	£	s.	d.
Total Assurance, Annuity, and Endowment Funds (as per Revenue Account) ...	2,591,342	5	1
Claims admitted, proofs not yet completed	16,814	18	0
Annuities	20	13	4
Commission	733	4	5
Medical fees	685	13	0
Premium and other deposits	3,943	9	1
Fire Insurance moneys in suspense	100	0	0
Tontine Savings Funds ...	10,517	16	5
Reserve for possible depreciation in freehold and mortgage securities ...	24,000	0	0
	£2,648,157	19	4

Assets.		£	s.	d.
Loans on policies		464,829	0	4
Government securities ...		872,016	2	7
Municipal Corporation debentures		106,721	3	4
County securities		1,000	0	0
Otago University debentures		15,000	0	0
Harbour Board debentures ...		43,411	10	8
River Board debentures ...		435	0	0
Town Board debentures ...		500	0	0
Landed and house property ...		116,169	16	9
Office furniture (Head Office and Agencies)		3,256	2	6
Mortgages on property ...		812,585	11	9
Properties acquired by foreclosure		29,906	11	0
Overdue premiums on policies in force	£4,767 12 8			
Outstanding premiums due but not overdue ...	29,088 11 5			
		33,856	4	1
Overdue interest	760 12 1			
Outstanding interest due but not overdue ...	2,230 1 3			
Interest accrued, but not due ...	30,285 17 0			
		33,276	10	4
Agents' balances		3,746	19	11
Sundry accounts owing ...		1,456	16	9
Cash in hand and on current account		109,990	9	4
		£2,648,157	19	4

THE PUBLIC TRUST OFFICE OF NEW ZEALAND.

CONSTITUTION AND OBJECTS.

THE Public Trust Office was constituted by "The Public Trust Office Act, 1872." The original scope of the office and the powers of the Public Trustee have since been much enlarged, to enable the office to perform the various services and the Public Trustee to exercise the responsible and important functions for which "The Public Trust Office Consolidation Act, 1894," now provides the necessary authority.

The office is designed mainly to afford, at low rates of commission, a secure and convenient recourse in every case where a person residing either in New Zealand or abroad, and desiring to form a trust or appoint an agent or attorney in the colony, may be in doubt or difficulty as to the choice of a trustee, executor, agent, or attorney. The office is also designed to relieve those who may be appointed trustees of property in the colony, or who, after having accepted the trusts of such property, may, for various reasons,

be unwilling or unable to undertake or continue the administration.

The appointment, however, of the Public Trustee, otherwise than to the administration of an intestate estate, is subject to the consent of the Board of the Public Trust Office; and the Public Trustee cannot under any circumstances accept an appointment jointly with any other person.

"The Public Trust Office Consolidation Act, 1894," itself affords in sections 12, 13, and 14, as clearly, succinctly, and comprehensively as any other form of words could do, a general idea of the object of the Public Trust Office, and of the nature of the business which the office may undertake. Those sections provide as follows:—

12. Where the Crown, the Governor in Council, or the Governor, or a public officer, or a Court, Judge, public or private corporate body, or any person, now or hereafter can appoint a trustee, executor, administrator, guardian, committee, agent, or attorney, any of such appointments may be made of the Public Trustee if he consents thereto. The duties and rights of the Public Trustee under any appointment shall be the same, subject to the express provisions of this Act, as if the appointment had been made of a private person.

13. With the consent of the Supreme Court or a Judge thereof—

Trustees, whether appointed before or after the coming into operation of this Act, may, unless expressly prohibited, and notwithstanding the terms of the trust as to the number of trustees, appoint the Public Trustee sole trustee in their place;

Executors, whether appointed before or after the coming into operation of this Act, may, unless expressly prohibited, before or after taking out probate, appoint the Public Trustee sole executor;

Administrators, with or without a will annexed, whether appointed before or after the coming into operation of this Act, may, unless expressly prohibited, appoint the Public Trustee sole administrator;

Where there are more trustees, executors, or administrators than one, any one trustee or executor (whether before or after proving a will), or any one administrator, may apply to the Supreme Court or a Judge thereof to have the Public Trustee appointed sole trustee, executor, or administrator. All applications to the Supreme Court or a Judge thereof under this section may be by petition, or in such other manner as by rules made under section twenty-eight of this Act may be provided; and the Court or Judge may, and is hereby given jurisdiction to, make such order as it or he thinks fit.

Where to the appointment of a trustee, executor, or administrator the consent of any person is requisite, and such person refuses to consent to the Public Trustee being appointed, or where the person to consent is an infant, idiot, or lunatic, or a person of unsound mind, or is absent from the colony, or is under any other disability, then an appointment of the Public Trustee may be made without such consent, if a Judge of the Supreme Court consents thereto.

Where the Crown, the Governor in Council, the Governor, or any public officer, or any Court or Judge, or any corporate body or association, or person, whether public or private, within or without the colony, desires to or can create any trust, then, unless expressly prohibited, the Crown (by the Governor), the Governor in Council, the Governor, or such public officer, Court, or Judge, corporate body, association, or person may, for the purposes of such trust, appoint the Public Trustee trustee, upon such trusts, and under and subject to such powers, provisions, and conditions, as shall be expressed.

Upon any appointment of the Public Trustee under sections twelve and thirteen of this Act, then, by virtue of the appointment, all property, rights, powers, and functions shall, without any conveyance or assignment, become thereby vested in the Public Trustee.

The Public Trustee, when appointing or acting under this Act as trustee, executor, administrator, guardian, committee, agent, or attorney, shall have the same rights and immunities as a private person acting in any of those capacities would have.

14. The Public Trustee, upon the death of any person domiciled in New Zealand, or who has property in New Zealand, who has died or shall hereafter die within New Zealand or elsewhere intestate, shall, if he thinks fit to apply therefor, be entitled to administration.

The application may be made in any judicial district of the Court at the discretion of the Public Trustee.

Upon such application, no further proof of the death and intestacy of any person shall be required than an affidavit that, after due inquiries, the Public Trustee is satisfied that such person died intestate.

The Public Trustee shall be entitled, as of right, to such administration: Provided that if some other person within the colony who, if it were not for this section, would be entitled to such administration, applies for such administration, then the Court or Judge may grant administration to such person: Provided that it shall not be necessary for the Public Trustee, nor shall the Court or Judge require him, to give notice of such application to any such person.

THE SECURITY.—CAPITAL FUNDS AND INTEREST GUARANTEED.

The security and fidelity of the administration of the Public Trustee cannot but form a great attraction to any person who may contemplate the appointment of a trustee, executor, administrator, agent, or attorney. The Public Trust Office is a department of the Government service. The good faith of the administration is guaranteed by statute, and the colony is pledged to maintain the integrity of capital funds placed in the Public Trust Office, either without any direction for investment, or to be invested at the option of the Public Trustee in any of the securities in which, unless expressly prohibited, he may invest all capital—that is, in any of the securities authorised by section 31 of the Consolidation Act as amended by the Act of 1895:—

(1.) In the Government securities of the United Kingdom, or of any colony or dependency thereof, issued under the authority of the Parliament or other legislative authority of the said kingdom, colony, or dependency respectively, and secured upon the public revenues thereof:

(2.) In debentures issued by any local authority under any law now or hereafter in force, secured upon general or special rates, or upon real estate held in fee-simple free from encumbrances, or upon the rents and profits of real estate held in fee-simple free from encumbrances: Provided that no greater advance shall be made where the debentures are secured upon real estate than three-fifths of the value of such real estate; and if the debentures are secured upon rents and profits, then no advance shall be made unless such rents and profits are sufficient to pay two-thirds more than the annual interest payable in respect of the advance:

"Local authority" means, for the purposes of this subsection, the Council, Board, or other authority of a city, borough, county, town district, road district, drainage district, harbour district, or river district, now or hereafter constituted under an Act of the General Assembly:

(3.) In advances by way of mortgage on the security of any real estate held in fee-simple within the colony and free from all encumbrances, to an amount not exceeding three-fifths of the estimated value of such estate, according to a valuation approved by the Board:

(4.) In fixed deposits in any bank of issue created or established by or under any Act of the General Assembly, or by Royal Charter, and carrying on business in the colony, or in the Post-Office Savings-Bank, or other savings-bank established in New Zealand in accordance with any law affecting such banks.

The colony further guarantees on the capital funds arising from the estates in the office, and available for investment at the discretion of the Public Trustee, a common rate of interest, to be determined from time to time by Order in Council, and to be credited quarterly, *free of all office charges of the Public Trust Office*, to the properties from which the funds arise. Thus the funds are afforded a STATE GUARANTEE,—

1. Against loss from investments in bad or insufficient securities;
2. Against loss from delay in the investment;
3. That the interest determined from time to time by Order in Council shall be regularly and punctually paid, *free of all charges of the Public Trust Office.*

A person making a will, or arranging a trust, or proposing the appointment of an agent or attorney, must always be seriously concerned as to the security of the funds; and the larger the amount of the funds the greater will be the concern for security, and the less for the rate of interest. Private executors, trustees, or agents, or attorneys whose administration or conduct should be at fault, may be without the means of repairing the errors for which they are accountable; or may, in cases where their acts are justifiable, make disastrous and ruinous investments.

The Public Trustee, in his official capacity, never dies, never leaves the country, and never becomes disqualified or involved in private difficulties, or distrusted. By his appointment as trustee, executor, administrator, agent, or attorney, the preparation of the numerous deeds, and the consequent expense, which might become unavoidable in the case of a private appointment, are rendered unnecessary. These advantages will be readily appreciated by all who have had any experience of private appointments.

SPECIAL POWERS OF THE PUBLIC TRUSTEE.

If after the death of a person leaving a will, of which the Public Trustee is not appointed executor, three months should elapse without an application being made for probate or administration, the Public Trustee may, on applying, obtain letters of administration, unless the person entitled to probate should then apply or give satisfactory reasons for the delay. As to the estates of persons dying intestate in New Zealand or elsewhere, and domiciled in or having property in the colony, the Public Trustee is entitled as of right to the administration in cases where the persons who would otherwise be entitled to administer neglect to apply for or fail to obtain the necessary authority.

When an intestate estate to be administered by the Public Trustee is of no greater value than £250, he is authorised to assume

the administration by filing in the Supreme Court an election to administer. To estates of small value it is of no little importance that the Public Trustee should be thus empowered to save them from the expense of letters of administration.

For the purposes of the administration of an estate where the Public Trustee may be appointed trustee, executor, administrator, guardian or committee, or may be otherwise authorised to act under the Public Trust Office Consolidation Act, he may, where he is not prohibited by statute or instrument, and without the consent of the Supreme Court, do everything in general that a prudent owner might be reasonably expected to do, except to sell, lease, dispose of, or borrow money upon real estate of value exceeding £500. These powers enable the Public Trustee not only to avoid delays and interruptions in the course of his management of an estate and the expense which may thus be occasioned, but to save to the estate the profit which only the possession of such powers would make it practicable to save.

The Public Trustee may at any time exercise the necessary powers of executor or administrator for the protection of an estate, and his authority to assume this temporary power extends to testate as well as intestate estates. This authority is highly serviceable to the interests of estates in every case where a property may be suffering, or in danger of suffering, injury through neglect or delay to take out probate or administration. The security of property is strengthened by the existence of a power to protect, which can be invoked when protection is required.

The Public Trustee may further use a large discretion in the application of the residue of intestate estates; and he is in like manner empowered to apply, consistently with the provisions of the instruments under which he is acting, the shares of testate or trust estates towards the maintenance, education, or advancement of the beneficiaries.

Thus, in the case of an intestate estate, the Public Trustee may deal thus with the net residue:—

(1.) When not exceeding £200, he may apply it to the maintenance, &c., of the widow or infants:

(2.) When not exceeding £50, he may pay it wholly to the widow:

(3.) When there are infants entitled, and the share of an infant does not exceed £50, he may pay such share to the widow or other person for the maintenance of the infant:

(4.) When the person entitled to the residue does not claim it within three years after the death of the intestate, and the Public Trustee does not know or is unable to ascertain the existence of any next-of-kin, he may pay or transfer it wholly to the widow:

And in the case of testate or trust estates, where provisions are not expressly made for the maintenance of an infant, or where provisions are not expressly made to the contrary, the Public Trustee may apply—

(5.) The whole or part of income to which an infant is entitled in possession to the maintenance of the infant;
(6.) The capital share to which an infant is entitled in possession to the maintenance of the infant;
(7.) The half, or to the extent of £500, of the *capital share* to which an infant is entitled in reversion immediately expectant on a prior life-interest to the maintenance of the infant, on the written consent of the person having such life-interest;
(8.) The presumptive or contingent shares of infants in the capital and income towards the maintenance of the persons of the class to whom such capital and income would be payable in certain contingencies, with the consent of the persons having prior estates or interest.

The special powers of the Public Trustee in respect to testate and trust estates—powers with which private trustees could not expect to be clothed, but which may be safely granted to an officer in the position of the Public Trustee—enable him to supply promptly and inexpensively what may be described as deficiencies or omissions in instruments of trust, and thus, so to speak, perfect an incomplete will or settlement; enable him to make, for instance, the maintenance of infants, for whose benefit an estate is to be administered under a will containing no directions for maintenance, such a charge on the estate as the testator must, from the circumstances of the case, be supposed to have intended.

The advantage which estates in the Public Trust Office must unquestionably derive from the Public Trustee's possession of such large powers of general administration affords another powerful argument in favour of the office. To sum up, in New Zealand the law provides for the estates of deceased persons a choice between two administrations: one an administration by private trustees, necessarily restricted in their powers, and subject to all the contingencies of private management; the other an administration by the Public Trustee, in which he is authorised to exercise large discretionary powers in the interest of the estates, and in which the integrity of the capital funds and his own good faith are guaranteed by the colony.

The Public Trustee as Agent or Attorney.

The Public Trustee's authority to accept the appointment of agent or attorney—that is, to act in effect as a public attorney, for whose conduct the colony is responsible—enables him to render a great variety of services of a temporary and subordinate character, services for which he could rarely be employed without such authority, owing to the expense in that case of the necessary deed of trust. To persons leaving the colony for a time, or desiring for other reasons to arrange for the temporary management of their property, the Public Trust Office must prove a convenience, especially in

cases where the appointment of any other agent or attorney would be unsatisfactory.

As agent or attorney for a property that may eventually become subject to a will of which he is executor, the Public Trustee acquires knowledge of great service to his ultimate administration. The person, for example, who may appoint the Public Trustee to be trustee or executor under a will, and afterwards, while yet living, may desire to be relieved of the care and management of the relative property, will find in this authority of the Public Trustee to act as agent or attorney a provision by which the desired relief can be secured through the future administrator of the estate; and the Public Trustee will, as agent or attorney, obtain a knowledge of all the circumstances of the property, and continue the ultimate administration with the profit and advantage which the estate must obviously derive from that knowledge.

General.

The draft of a will, deed of trust, settlement, or power of attorney, in which the Public Trustee is to be appointed executor or trustee, agent, or attorney, will, when required, be examined in the Public Trust Office free of charge, for the purpose of bringing to light any provisions which may be ambiguous, or such as the Public Trustee could not follow; and testators who may appoint the Public Trustee to be their executor should therefore submit their wills to him for the purpose of finding out whether the Board would be likely to accept the trusts, and of obtaining, without expense, a careful consideration of any objections.

Any property can be vested in the Public Trustee upon trusts defined in the deed creating the trust, and the income from such property can be dealt with as may be desired.

Wills of living persons may be deposited in the office for safe custody. The Courts of the colony competent to grant probate or letters of administration refer, in the case of any application for such probate or letters, to the list of wills in the Public Trust Office; so that the deposit of a will with the Public Trustee insures that it shall be forthcoming on the death of the testator, and when the administration of the relative estate becomes necessary.

In the very large number of cases where persons die intestate it is the duty of the Public Trustee to administer if the person who is otherwise entitled to administer neglects to apply for or fails to obtain letters of administration. Almost all who have realised the care and responsibility inseparable from the administration of an estate, and who understand what services the Public Trust Office is capable of rendering, and what relief may be obtained through the agency of the office, would prefer to allow an estate in which they may themselves be interested, or which they are expected to manage, to be administered by the Public Trustee. After the assets of an intestate estate have been realised and the debts and expenses paid, the Public Trustee, on receiving satisfactory proofs of kinship,

distributes the residue in accordance with the law. If the relatives have to be found, the Public Trustee takes active steps to trace them.

The Public Trustee is authorised by "The Lunacy Act, 1882," to undertake the administration of the estates of lunatics in every case where no committee may be appointed for the estate; and by "The Lunatics Act Amendment Act, 1895," he is authorised to exercise large powers in such administration. He may, where the value of the estate does not exceed £500 exclusive of debts or other charges, administer without being required, as formerly, to obtain the previous sanction of the Supreme Court, and administer, consequently, with an economy to the estate and a benefit to the family of the lunatic such as would seldom result from any but a competent administration by a member of the lunatic's family. The property, wherever situated, of a lunatic in the colony vests in the Public Trustee in the same manner as it vests in him when he is appointed committee of the lunatic's estate by the Supreme Court. Every private committee of a lunatic's estate is required to render to the Public Trustee, at such times as he shall prescribe, an account of the affairs of the estate and of all the transactions of such committee; and five days' notice is to be given to the Public Trustee of any application to appoint a committee of a lunatic's property. The Public Trustee must, therefore, exercise, with respect to the estates of lunatics in the colony which may not be administered by him, a supervision which cannot but operate favourably to the interests of those estates. It may be remarked as an interesting fact that of the estates of the lunatics in the asylums of the colony fully 90 per cent. are administered by the Public Trustee.

For the purpose of the administration of statutory trusts the Public Trust Office renders very valuable and important services to the Government and to the colony. It is, and must obviously be, of great moment to the public that the administration of many funds and properties should be such as to leave no doubt that the directions of the trust will be faithfully observed. Where a fund or property of which the Government may desire to create a trust is not specially authorised by statute to be placed in the Public Trust Office, the purpose is served by the execution of an ordinary trust instrument.

The administration of the Public Trustee is exposed to a stronger light of public criticism than the administration of a private trustee could be, and any reasonable complaints from the beneficiaries, or from any one, would be echoed by the Press as matters of public concern; and these considerations must be sufficient to insure a careful and strictly conscientious observance by the Public Trustee of his obligations.

The reputation and services of the office have attracted attention in the United Kingdom and in other countries, and several trusts of money belonging to persons resident abroad have already been accepted by the office.

Return of Business.

The number and value of the estates of each class in the Public Trust Office were, at the close of the years 1890, 1891, 1892, 1893, and on the 31st March, 1895, 1896, and 1897, as shown in the following table:—

Number and Value of Estates in Public Trust Office, December, 1890, to March, 1897.

Class.	Number of Estates							Value of Estates						
	On 31st Dec., 1890.	On 31st Dec., 1891.	On 31st Dec., 1892.	On 31st Dec., 1893.	On 31st Mar., 1895.	On 31st Mar., 1896.	On 31st Mar., 1897.	On 31st Dec., 1890.	On 31st Dec., 1891.	On 31st Dec., 1892.	On 31st Dec., 1893.	On 31st Mar., 1895.	On 31st Mar., 1896.	On 31st Mar., 1897.
								£	£	£	£	£	£	£
Wills and trusts (including Sinking Fund Accounts)	288	343	354	371	392	447	466	418,047	415,160	442,671	543,239	586,814	673,478	744,742
Intestate estates ..	752	794	845	868	850	812	781	75,305	83,381	81,650	84,436	80,287	86,132	88,751
Real estates ..	109	114	117	117	113	91	86	23,496	24,190	22,706	23,465	22,462	14,686	11,161
Lunatic estates ..	137	181	202	271	335	434	510	32,918	34,913	40,380	51,278	72,706	73,995	88,133
Native reserves ..	99	100	101	102	103	107	112	340,869	344,692	346,499	348,500	350,000	350,000	355,000
West Coast Settlement Reserves..	293	293	293	293	293	293	293	349,462	350,289	350,839	400,000	450,000	600,000	600,000
Unclaimed lands..	..	..	..	..	..	52	86	..	..	..	..	..	8,662	10,376
Totals ..	1,678	1,825	1,912	2,022	2,086	2,236	2,334	1,240,097	1,252,625	1,284,745	1,450,918	1,562,269	1,806,953	1,898,163

CHARGES.

The commissions and charges which the Public Trustee is authorised to levy for the services of the Public Trust Office are calculated to be no more than sufficient to meet the expense of maintaining the department without loss; and it will be found that the charges for the administration of a property by the Public Trustee will compare very favourably with the expense of an administration by any other agency.

TECHNICAL EDUCATION.

"THE Manual and Technical Elementary Instruction Act, 1895," provides for the granting of subsidies to classes established for instruction in such branches of science and art as are encouraged by the Science and Art Department (South Kensington) and the City and Guilds of London Institute, and also to workshops connected with public schools; and the same Act allows part of the ordinary school-time to be given to elementary manual instruction. During the past year subsidy was paid on classes in drawing and painting, clay-modelling, carpentry and other woodwork, upholstery, plumbers' work, painters' work, ironwork, mechanical engineering, mechanics, physics, chemistry, agricultural analysis, laundry work, dressmaking and millinery, cookery, mathematics and geometry, shorthand, and bookkeeping. In several of the high schools manual and technical instruction is given as part of the school course.

There are four fully-equipped Schools of Art, the classes in which during the year were attended by about 1,380 students.

In connection with the Canterbury College there is an endowed School of Engineering and Technical Science, the students in which work for the university degree of B.Sc. in Engineering. Eighty-seven students attended last year.

The Canterbury Agricultural College has an endowment of over 60,000 acres of land, and possesses extensive buildings, and an experimental farm of a very complete character. The students work for the university degree of B.Sc. in Agriculture. There were forty-three students in 1896.

There are two Government Schools of Mines located in districts in which mining is actively carried on, and the Otago University maintains a professorial chair of mining and metallurgy, to which the Government makes an annual grant of £500. The number of students in mining in 1896 was 229. The Government gives three scholarships of £30 to £50 a year in this subject.

Yearly examinations are held upon papers sent out by the Science and Art Department and the City and Guilds of London Institute. The following are the results for 1896:—

Subjects of Examination.	Papers.	Passes.
South Kensington—		
Art	681	495
Science	128	56
Students' works	66	38
City and Guilds Institute—Science	48	26
Total	923	615

The expenditure on technical education for the year was approximately as follows:—

Technical classes and examinations	£1,424
Schools of Art	4,604
School of Engineering	1,223
School of Agriculture	9,374
Schools of Mines	3,150
Total	£19,775

Of this sum, £2,594 was paid by the Government; £7,483 was from endowments, or from funds derived indirectly from the Government; and £6,185 was from fees, sale of farm produce, &c.

AGRICULTURE.

By M. Murphy, F.L.S.

It is generally admitted that there is no part of the British dominions where agriculture, in its widest sense, can be carried on with so much certainty and with such good results as in New Zealand. The range of latitude, extending as it does from 34° to 47° south, secures for the colony a diversity of climate which renders it suitable for all the products of subtropical and temperate zones, while an insular position protects it from the continuous and parching droughts which periodically inflict such terrible losses on the agriculturist and pastoralist of Australia and South America.

Again, the climate, although somewhat variable, never reaches the extremes of heat or cold. So genial, indeed, is it that most animals and plants, when first introduced to the colony, assume a vigour unknown to them before.

North Island.

All the best forage-plants and grasses thrive most admirably, continuing to grow throughout the year with little intermission. Stock of every sort thrive and fatten rapidly on the pastures, coming to maturity at an early age without the aid of roots or condimental

foods. All cereals flourish equally well, more especially Indian corn, which produces from fifty to eighty bushels per acre.

So full is the soil of plant-food that several continuous crops of potatoes or cereals may be taken with little apparent exhaustion. Wheat, oats, and barley thrive where the soil is not too rich; otherwise they produce enormous crops of straw, without a corresponding yield of corn. The tobacco-plant thrives well, as do also hops and sorghum, broom-corn, peanut, hemp, ramee or rhea (China grass), together with a large variety of economic plants, the growth of which will one day afford employment for a large population. In addition to these, all the British, Chinese, and Japanese fruits, with oranges, lemons, limes, olives, and vines (in the northern part), flourish abundantly, requiring but ordinary care. Potatoes are largely grown, and yield heavy crops.

Much of the country along the south-west and west coast is being rapidly taken up, and the primeval forest is fast disappearing before the settler's axe. For the most part, the soil is fertile, and the growth of grass and clover is extremely rapid and vigorous when sown on the surface after the felled timber has been destroyed by fire.

To the British husbandman it will seem almost incredible that the best pasture-grasses grow and thrive as they do with no other preparation than the ashes resulting from the burnt timber, with no ploughing and no previous loosening of the soil—this, of course, being impossible amongst the forest of stumps—and yet, in less than a year from the date of scattering the seed, this same land will fatten from five to six sheep per acre.

So rapidly are these fertile forest-lands being cleared and converted into pastures that the demand for stock (principally dairy) has greatly increased, and this demand must continue for a series of years before it is fully met.

Before the introduction of the factory system stock was so unsaleable, especially in the North Island, that little or no attention was paid to this branch of rural economy, and the supply fell to the lowest ebb. The demand which has now set in is chiefly due to the settlement of the bush-lands with small selectors and the development of the dairy industry.

Those who in the past have watched the progress of New Zealand, especially of the North Island, have always maintained that when the Maori difficulties and other impediments to settlement were over, the prosperity of the country would advance at a very rapid rate. The time has now come, and all that is required to expedite the coming prosperity is the settlement of our lands by a thrifty class of settlers.

There are millions of acres yet unoccupied, a great portion of which is of good quality, and only waiting the hand of man to make it carry, with very little cost, large herds of dairy stock, with flocks of long-wool and crossbred sheep. The west coast of the island is essentially a cattle-country. Considerable areas in the midland

districts are adapted to long-wool sheep, as is also the country along the east coast. Much of the country may be described as being good sheep-land, a large portion of which is quite capable of carrying two sheep to the acre, and some of it as many as three or four.

Middle Island.

If the North Island has a splendid inheritance in her forests, the Middle Island can boast of her magnificent plain-lands, rolling downs, and vast mountain ranges, all of which, to a greater or less degree, have already been made to contribute to the wealth of the colony.

The central portion of the Middle Island presented to the first-comers a vast plain, covered only with waving tussock-grass, offering little or no obstruction to the plough.

Travelling south, the country assumes a different character: easy, undulating downs, well watered, here and there interspersed with fertile plains, the greater portion admirably adapted for agriculture, and all of it suitable for pastoral purposes.

The climate of the Middle Island is not so warm in summer nor so mild in winter as that experienced in the North Island. However, as has already been stated, there are no extremes of heat or cold. Much more might be said in praise of this portion of the colony. It is deemed necessary to say so much in order that readers may better comprehend the comparative ease with which every kind of farming is carried on in New Zealand as compared with other countries less favourably situated.

Agricultural Statistics.

Full particulars, with comparative tables showing the progress of agriculture in the colony, will be found in the statistical portion of this work, at pages 299 to 307.

Wheat.

In the last issue of the Year-book comment was made on the prospects for farm and pastoral products, and the general prosperity which had set in, a prosperity which it is gratifying to note still continues. The advance experienced has not been very marked except in the price of wheat. It has, however, been sufficient to give a fresh impetus to farming operations. The area under wheat has exceeded that of the previous season, and it is anticipated that the area in the coming season will show a still larger acreage. The dry weather experienced during the past summer and autumn had the effect of materially reducing the average yield. The general average of the colony for 1896–97 is shown as 23 bushels per acre, which in the earlier season gave promise of 28 bushels. Serious as this loss must be considered, it has in a great measure been compensated for by

the superior quality of the grain harvested, and the increased value per bushel.

The Canterbury Plains, the great wheat-growing district of the Middle Island, extend 150 miles north and south, running inland from the sea for forty miles, the whole forming an area of about 3,000,000 acres. A great portion of this vast plain is admirably adapted for the production of wheat, barley, and oats of the best quality, the growing of which has been carried on extensively, more especially since the introduction of the reaper-and-binder. The area under wheat in Canterbury in 1896–97 was 174,579 acres, with an estimated yield of 3,666,159 bushels. The land is for the most part free from stones or impediments of any kind. Single-furrow ploughs are now rarely seen, double- and three-furrow ploughs being in general use. Three horses, occasionally four, with a man or a boy, can turn over three acres per day on the plains, at a cost of 5s. or 6s. per acre. A stroke of the disc or other harrow, followed by the seed-drill and light harrows, completes the operation of sowing.

Seed-sowing commences in May, and can be continued as weather permits through the winter, and in the heavy swamp-land (drained) on into September and even October. From 1¼ to 1½ and 2 bushels of seed per acre are usually sown, the quantity increasing as the season advances.

Good results are in general obtained by feeding-off the early-sown grain with sheep, followed by the harrows and roller. The average yield on the better class of soil in favourable seasons is from 40 to 60 bushels per acre of dressed grain. The general average of the whole colony is usually 25 or 26 bushels, but this varies with the season. This discrepancy is accounted for by the fact that so much wheat is grown on the lighter soils.

Several varieties of wheat are grown, but Hunter's White, Pearl, and Velvet Chaff are the favourite kinds for winter sowing. Red and White Tuscan are usually sown in spring.

In view of the periodical attacks of rust, advantage will doubtless be taken of the experience gained by carefully-conducted experiments which have been carried on during the past few years in Victoria, New South Wales, and Queensland, where it is claimed that certain wheats have been found impervious to the attacks of rust, thus minimising the losses caused by that fungus. Several varieties are named as rust-resisting, and farmers should combine and procure these varieties in order to give them a trial. It was reported that early sowing was the best preventive measure, for the reason that the older the leaves are the tougher they become. This theory, however, has not been borne out by actual observation in this colony, as early-sown crops are also sometimes attacked, if not so severely.

Dressing the seed with genuine bluestone is found to be a certain specific for smut in its various forms.

The Oamaru (North Otago) district is famous for the quality of its wheat, grown on limestone soil.

Oats and Barley.

Otago and Southland districts excel in the production of oats, which is their principal cereal crop, the respective acreages last season being 58,307 acres of wheat, yielding 1,690,903 bushels, and 194,273 acres of oats, yielding 6,799,555 bushels.

The usual yield of oats in Otago and Southland is from 40 to 80 bushels per acre, the cost of production being about the same as wheat—viz., £2 per acre when grown from grass-land, and £1 10s. from stubble. The varieties of oats most in favour are Winter Dun, Canadian, Sparrowbill, Tartary, and Danish.

Malting barley, of very superior quality, is grown in Nelson and Marlborough, where the soil and climate appear to be peculiarly adapted to its culture.

Remarks on Cereals.

A few years ago it was accepted as a fact that the days of profitable wheat-growing had come to an end; it was believed that the farmer would have to adopt other methods to make both ends meet. The acceptance of this theory was in part responsible for the depression which ensued. Plough horses became unsaleable; implement makers complained of the want of trade, and other industries suffered in proportion. Large areas reverted to pasture for feeding sheep, from which a more certain return could be secured. It was considered that if wheat was to be grown at all it would have to be confined to the very best soils. To a large extent this is still true. Turnips, rape, barley, oats, and peas, &c., can be grown on the lighter and less fertile lands with a greater certainty of success and profit. The curtailment of the wheat area referred to was, however, by no means an unmixed evil, for had farmers gone on cropping indiscriminately, our fields would not only have become exhausted, but they would have been polluted with weeds to an irrecoverable extent.

The low price of cereals induced farmers to lay their lands down in grass and clovers, or in turnips and rape for sheep-feed. The manufacture of cheese and butter received a great stimulus.

The cultivation of clover for seed has now become an important industry, and will ultimately develop into one of the most lucrative on arable farms. The quality of the seed is unsurpassed, and the percentage of vitality far exceeds that of the great bulk of the imported article. The production of alsike and white clovers is also increasing. The perfection to which seed-cleaning machines have been brought enables the farmer to turn out a perfect sample free from all impurities. These industries are now firmly established, so that whatever vicissitudes corn-growing may from time to time be subjected to in the future they will be little affected. Farmers have come to see that a mixed system is the only safe course to pursue in the management of their land. The rise in cereals has now given an all-round stimulus to farming, a greater demand for farm-horses, and a corresponding rise in prices; an increased demand for

farm implements, farm hands, seeds, &c., and a decided rise in the value of good agricultural lands. Potatoes, too, although only a medium crop (the result of the prolonged drought), have realised satisfactory prices, leaving a fair margin for profit.

Root-crops.

Potatoes: Potatoes are largely grown throughout New Zealand. On suitable soils very heavy crops are raised, it being no uncommon thing to dig from 8 to 10 tons per acre, although the general average is much lower, for the reason that unsuitable land is frequently devoted to this crop. The bulk of the crop is planted without manure, but, where used, bonedust, superphosphate, blood-manure, or animal guano (which may be procured of first quality from the local manure manufactories), from 1 cwt. to 2 cwt. per acre, is applied with good results. The potato is, however, an expensive crop to grow, costing from £5 to £6 per acre. It is, however, a very profitable one, where the crop is good and prices are not below 25s. to 30s. per ton. The land is usually broken out of grass, skim-ploughed in autumn, ploughed deeply in spring, and thoroughly tilled; or they may be grown in drills opened and closed with a double-furrow plough. The seed—15cwt. per acre—is then ploughed in under every third furrow, the after-culture consisting of harrowing just as the crop is appearing over ground (by this means myriads of seedling weeds are destroyed); drill-grubbing, hoeing, horse-hoeing, and earthing-up being the subsequent operations. Heavy crops of wheat, oats, barley, beans, or peas can always be relied upon after potatoes, season permitting.

Turnips: The turnip-crop has now become one of the most important in the colony. The area under this crop for 1896–97, according to the agricultural statistics, was 408,668 acres. On virgin soil turnips can always be relied upon as a certain crop without any manure, even on a single furrow and a couple of strokes of the harrow. But, as most of the land (at least in the Middle Island) has already been cropped, turnips cannot now be successfully grown without the aid of manure. In the nature of things, from a climatic point of view, farm-yard manure cannot be procured in sufficient quantity; artificial manures are therefore largely used, from 1 cwt. to 1½ cwt. of superphosphate of lime per acre being now applied with the best results, securing ample crops of sound roots, from 15 to 30 tons per acre. The seed is sometimes sown in drills on the flat, the manure being dropped in front of the seed by the same machine, from ½ lb. to 1 lb. of seed per acre being used; when sown broadcast a smaller quantity will suffice. Sometimes the manure is deposited in a liquid state, by machines manufactured for the purpose, called water-drills. This system invariably secures a rapid and vigorous braird, forcing the young plant into the rough leaf, after which it is secure from the attack of the turnip-beetle, usually the first enemy of the young plant's growth. So soon as the turnip-plants reach the third or fourth leaf, they are thinned by

a scuffler, made for the purpose, which is drawn across the drills, bunching the turnips and thoroughly loosening the soil. The drill-grubber and scuffler are used as required till the leaves meet. This kind of culture produces capital crops at a minimum of cost. Large areas are sown broadcast, and, if found too thick, the harrows are run through them; in any case, a stroke of the harrows is a great help in promoting the growth of the plant. The varieties used are Devonshire Grey for early and very late sowing; Purple- and Green-top Aberdeen are the most generally grown. Swede turnips, from their proneness to the attack of the turnip aphis, are not so much grown, though they produce enormous crops in Otago and Southland, where the climate is more suitable. The turnip-crop is generally fed off by sheep intended for freezing. It is estimated that an acre of good turnips, with a little hay or oat-chaff, will fatten from eight to fourteen sheep. Turnip-sowing commences in November, and may be continued till the end of December. Stubble turnips may be sown in March, but this can only be considered as a catch-crop. It, however, often proves of great value, supplying an abundance of green food for ewes with early lambs. Turnip-land is usually sown with oats or barley, and sometimes spring wheat.

Rape is largely grown as sheep-feed, and may be sown either in early spring or immediately after harvest, the stubble being skim-ploughed or broken up with the spring-tined cultivator. This crop is invaluable in the early spring, and may be fed-off in time for oats or barley. Dairy-cattle, however, should not be fed on rape, as doing so destroys the flavour of the milk.

Mangolds and Carrots are largely grown in some districts. They cost more money per acre than turnips to produce, as they must be hand-hoed; nor are they so suitable a crop for cleaning the land. Turnip-sowing does not commence till November or December, affording ample time for the destruction of seedling weeds; this important opportunity is largely lost in the culture of the mangold, which is usually sown in October. Mangolds are, however, an invaluable crop on a stock-farm, as they do not reach their primest condition until the turnip-supply is exhausted, usually in August. From 30 to 60 tons per acre is not an uncommon yield of these roots, often without the aid of manure, on rich swamp land.

Carrots are also a valuable crop, especially for horses; on sandy loams the yield reaches 15 to 20 tons per acre. Carrots impart a pleasant flavour to butter, and should be largely grown for dairy stock.

Fertilisers.

Another industry of growing importance has been called into existence: the manufacture of fertilisers, from the waste products of animals slaughtered for freezing. The demand for fertilisers must increase from year to year, as our lands become more frequently cropped. In the early days of the freezing industry, when the

demand for turnips became general, the native-grass land (tussock) was then in its natural state. All that was necessary was to turn this virgin soil over with a shallow furrow, harrow down, and sow the seed (a few ounces) to the acre, without any fertiliser whatever. A good crop was the inevitable result.

The plough has been over almost the whole of our available new lands. It is now found absolutely necessary to sow fertilisers with the seed to give the young plant a start. Assuming that 1¼ cwt. per acre is used all over the 515,000 acres in root-crops, this would mean an annual demand for 32,187 tons, without taking into consideration that used for grain, orchards, &c. One of the most practical men in New Zealand has, however, given it as his opinion that, with a proper course of rotation, it will be many years before it will be necessary to apply fertilisers to corn crops—except, indeed, in exceptional cases.

Notwithstanding the quantity of fertilisers manufactured in the colony, importations are made, principally from Australia. Mr. G. Gray, Lecturer on Chemistry at Lincoln Agricultural College, in a paper on "Soil Fertility" shows that the land is drained annually of 5,871 tons of nitrogen, 1,000 tons of phosphates, 2,438 tons of potash, and 1,006 tons of lime: so that there is room for still further enterprise in the manufacture of manures.

A fortune awaits the finder of extensive beds of coprolites in New Zealand. Traces have been discovered sufficient to awaken the hope that sooner or later payable deposits will be found.

Seeds.

Clover: Saving clover for seed has now become an established and a lucrative industry, adding materially to the farmers' income. Clover is sown with a spring crop, usually of corn, lightly grazed in the following autumn, and then reserved for a crop of hay, which, according to the season, yields from 2 to 3 tons per acre when cut in November or early in December. Some farmers prefer feeding off with sheep in preference to mowing for hay. The after-growth is then allowed to flower and seed, which it does very freely. Thousands of humble-bees may be seen in the clover-fields during the months of January, February, and March. The seed ripens in March, and is then cut and dried, and threshed out by machines known as clover-shellers. From 200 lb. to 300 lb. of seed per acre is considered a good crop, and sells readily at 4d. to 6d. per pound. Thus an acre of clover may yield in hay and seed quite £10 or £11. It must, however, be stated that, while a good crop of clover-seed is a most lucrative one, it is nevertheless a most precarious one. Owing to the lateness of the season of ripening, it sometimes happens that the fertilisation is imperfect, resulting in a majority of barren heads. This has given rise to a controversy as to whether the proper bee has been introduced. The point was referred to Miss Ormerod, the English entomologist, who settled the question in the affirmative.

White and alsike clover are now grown in considerable quantities. White clover yields enormously, as much as 300 lb. of alsike seed has been obtained per acre. These clovers are not so dependent on the action of the humble-bee for their fertilisation. They mature earlier, and are more easily threshed and cleaned than cow-grass or red clover.

Grass-seed Saving: All the most valuable British grasses flourish throughout New Zealand. Cocksfoot has been for many years a staple product of Banks Peninsula (Akaroa County), where the soil for the most part consists of decomposed volcanic rocks and vegetable mould. Large quantities of this seed are now raised in the North Island as well. The seed is of the finest description, frequently weighing 20 lb. to the bushel (12 lb. being a standard bushel). Cocksfoot thrives on a very wide range of soil, from the richest to the poorest, preferring, of course, the former. It may be found on the dry stony plains of the interior, green and healthy, when the surrounding herbage, introduced or indigenous, has yielded to the heat of the summer sun.

Growing ryegrass for seed is also an important industry. The seed is usually gathered by stripping; sometimes the grass is cut and tied, and afterwards threshed by machinery. The average yield is from 15 to 20 bushels per acre, weighing from 25 lb. to 32 lb. per bushel, 20 lb. being the standard weight. A common practice is to graze the land till midsummer; to take the stock off for a few weeks, and then to run the stripper over the ground. By this primitive method 10 bushels per acre are sometimes secured, being of the finest quality. Ryegrass seed is usually in good demand, and sells readily at from 3s. to 4s. per bushel.

Meadow fescue, one of the most valuable of all the grasses for permanent pasture on good land, is grown both in the North and Middle Islands, but as yet not very largely. A noticeable instance of the value of this grass for pasture purposes was illustrated in a paddock which came under the writer's notice. The paddock was laid off into three equal parts, and sown with perennial ryegrass, meadow fescue, and Italian ryegrass. When well grown, sheep were turned in. They at once commenced to feed on the fescue, eating it quite bare, while the perennial ryegrass was left almost untouched. The Italian ryegrass received considerable attention. The preference for the fescue was very marked. Growing grass-seed of all the finer kinds should be an important industry in New Zealand, but as yet very little attention is paid to it.

Small Seeds: New Zealand, from the nature of her soil and climate, offers a fine field for growing all kinds of farm and garden seeds. This circumstance has already attracted the attention of some of the larger seed-merchants of Great Britain, whose agents occasionally visit the colony with a view to inducing farmers and others to grow certain kinds of seeds. The industry is peculiarly adapted to small holdings, and well suited to young persons, the work being light and of an interesting character. Ready sale

can be found for carefully-grown and carefully-cleaned garden seeds.

Pulse: Peas and beans are largely grown for pig-feeding and for export; they form an excellent preparation for wheat. An extensive trade in peas of a certain description is done in the manufacturing towns of Great Britain; and efforts are now being made to secure a share of this trade for the colony by producing peas suitable for splitting for human food. The business is likely to prove a most remunerative one. Thirty bushels of peas are considered a fair crop, while 40 to 70 bushels of beans are often secured.

Cape Barley and Winter Oats: The demand for early-spring feed has resulted in the growing of these plants for forage. Their extreme hardiness renders them well adapted for autumn sowing. If sown in March they are ready for feeding-off in May; they may be fed off again in July, and on till the beginning of October, when, if allowed to run to seed, they will produce 40 to 60 bushels per acre, or they may be ploughed-in for turnips.

Tares are also grown, but not so largely as they deserve to be, especially for dairy stock. Mixed with oats, barley, or rye, they are excellent milk-producers; and when grown luxuriantly they destroy all kinds of weeds, and leave the land in fine condition for a spring corn-crop.

Lucerne: This permanent fodder-plant thrives admirably in most parts of New Zealand, yielding three to five cuttings in the year; and, if properly attended to, it will continue to yield liberal cuttings for seven or eight years. This is a most excellent crop for the small or large farmer, furnishing, as it does, an abundant supply of succulent fodder, in deeply-cultivated soils, during the drier months of midsummer, as well as in the early spring. All farm animals are partial to lucerne; pigs thrive admirably upon it. No farm should be without a well-cultivated plot of this plant.

European Flax.

Efforts have been made from time to time to establish this industry in New Zealand. It is, however, an industry which requires not only skilled labour but a large amount of attention from the time the land is prepared for the seed till the crop is pulled or cut. The attempt which was made to start the industry in Canterbury some few years ago demonstrated most forcibly how entirely suitable the soil and climate of the Middle Island are for the growth of this plant, whether for seed or for fibre. From 15 to 20 bushels of seed were produced per acre, and as much as 7 cwt. of fibre of very superior quality. Farmers, however, did not take kindly to the industry, preferring to grow cereals. 1,945 acres of linseed were grown last season, principally in Otago and Southland, for seed only, the straw containing the fibre being put to no practical use. The crop averages 15 bushels per acre, which realises 5s. per bushel for crushing for oil and oil-cake. Linseed grown for seed only is an exhausting crop, and one which fouls the land. When it is con-

sidered that the whole of our corn crop (embracing about 661,000 acres) is tied with twine (largely imported), it does not say much for our enterprise to allow the fibre of nearly two thousand acres (grown for seed) to go to waste. Allowing 2 lb. of twine per acre, the quantity of twine annually required amounts to 590 tons. It is satisfactory, however, to know that some attempt is about to be made to stay this culpable waste. This is a case where a substantial bonus might be offered for the first 100 tons of fibre produced and manufactured into twine. It would be the stepping-stone to the production of fibre for export.

Sugar-beet.

A great diversity of opinion prevails on the question of introducing this industry into the colony. Strenuous efforts are still being made in the Waikato District to establish this industry, but, notwithstanding liberal bonuses and other encouragements offered by the Government from time to time during the past twenty years the industry has not advanced beyond the initiatory stage. No doubt the promoters in Waikato have satisfied themselves that a sufficient quantity of roots could be grown containing a payable percentage of saccharine matter to warrant the extensive cultivation of this plant, but a well-organised system of testing every farming district in the colony as to its suitability for growing the most approved varieties of beets, producing the maximum of saccharine matter, is needed. Those who wish to know what has already been done in this matter are referred to the 1896 Year-book, page 365, where they will find an exhaustive paper by Mr. Gray, of Lincoln Agricultural College.

Cost of Working a Farm in New Zealand.

When comparing the cost of working a farm in England with one of the same size in the colony, several points have to be taken into account, such as the climate, the soil, labour, and machinery. In the colonies, wages are higher than in Britain; as a set-off against this, the colony can claim, firstly, that there are more fine working days in the year, that the fields are much larger, that the latest improvements in machinery have been introduced, that the soil is more easily worked, and that the genial nature of the climate renders it unnecessary to house stock during the winter months, at least in the North Island, thus saving the cost of attendance; secondly, that farming operations may be carried on continuously throughout the ploughing and sowing season; and, thirdly, that the paddocks are so large, and usually so level, that the double- and treble-furrow plough may be worked by one man or youth with three horses.

The hay-crop is simply cut one day, raked into windrows the next, and in a couple more it is ready for stacking.

Wheat is cut and tied by machinery, the stooks requiring no capping. It is frequently threshed out of the stook in favourable

seasons, thereby saving the cost of stacking and thatching; but this method is not recommended except in hot, dry seasons. When stacked, the stacks are rarely thatched, except, perhaps, on the weather side. This is a wise precaution, the neglect of which sometimes entails serious loss.

The manure bill, which is such a heavy item of annual expenditure with the British farmer, presses as yet very lightly on the farmers of the colony. It is, however, a notable fact, that the use of fertilisers is becoming more general; 1cwt. to 1½cwt. of superphosphates per acre is used with the turnip and other root-crops, for the purpose of forcing the young plant into the rough leaf, when it will be out of one danger—the turnip-fly. It will thus be seen how many advantages the colonial farmer has over the farmer of the old country.

Live Stock.

The number of each kind of live stock in the colony, with comparative tables, will be found in the statistical portion of this work, at pages 307 to 313.

Sheep.

Sheep: New Zealand has proved itself admirably adapted for the breeding of all classes of sheep, from the fine-combing merino to the strongest type of Lincoln. The merino occupies and thrives on the wild lands of the colony, from the snow-line to the border of the plains, as well as on the drier portions of the plains. The merino ewe furnishes the foundation for all the crossbred varieties. On the rich moist soils the Lincoln and Romney Marsh sheep flourish, while the finer English and Border Leicesters occupy the drier lands.

Crossbred Sheep: Those bred from merino ewes and long-wool rams are the most suitable for the frozen-meat trade, and are known as "freezers."

The dapper little Southdowns flourish wherever crossbreds thrive. Their more ponderous cousins, the Shropshire and Hampshire Downs, have their admirers, especially the Shropshire, which are largely used for crossing, with a view to producing early-maturing lambs. English Leicesters are also much sought after for this purpose.

Since the development of the frozen-meat trade, sheep-farming in the colony has undergone a radical change. At one time wool was the chief consideration, the surplus stock finding its way into the boiling-down vat, the tallow and pelts being the only products of value. Things have marvellously altered since 1882, the inaugural year of the frozen-meat trade. Farming has assumed a new phase, sheep-raising for mutton and wool being the most profitable branch. Small and large flocks of pure and crossbred sheep are now kept on all farms which are suitable for them, the object being the production of early lambs for freezing. The percentage of increase all over the colony is very high, especially in the paddocks,

where 100 to 125 per cent. is not uncommon in favourable seasons, while on the hill and unimproved country it varies from 45 to 80 per cent.

Shearing commences in September, and is continued till January. The usual price per hundred is from 15s. to 17s. 6d. Shearing-machines are gradually coming into use, but some sheep-farmers prefer hand shearing.

The average clips for the various breeds of sheep are approximately as follow: Merino from 4 lb. to 7 lb.; quarter-breds, about 6½ lb.; half-breds, 7½ lb.; three-quarter-breds, 8½ lb.; Leicester, 10½ lb.; Lincoln, 11 lb. Of course, very much larger clips are obtained from special flocks, as much as 25 lb. to 30 lb. per sheep; but the above figures represent general averages.

The staple of New Zealand wool, especially the long-wool and crossbred, is remarkable for its freedom from breaks and other imperfections incidental to countries subject to long droughts and scarcity of feed.

The most profitable sheep for New Zealand is that which combines the best fleece and the most suitable carcase for freezing purposes, together with early maturity. This is the class of sheep which some sheep-breeders have set themselves to produce. Whether such an animal, having fixity of type, can be evolved, remains to be proved; so much depends on the feed, situation, and soil. One or two breeders claim that the new breed, Corriedale, embraces these desired qualities and possesses a fixity of type.

The capability of New Zealand for producing mutton has not yet reached its limit. When the frozen-meat trade was first seriously considered, an assertion to the effect that the colony could soon find 1,000,000 sheep per annum for freezing without impairing the breeding-flocks was treated as highly chimerical by sheep-breeders of long experience. It is found, however, on reference to the statistical returns, that during the year 1896, 1,505,969 sheep and 792,037 lambs were exported from New Zealand. There are twenty-one freezing-works in the colony, with a full freezing-capacity of 3,665,000 sheep per annum. While congratulating the colony on the rapid development of the frozen-meat trade, it must be borne in mind that in Argentina strenuous efforts are being made to secure a share of the frozen-mutton trade carried on by New Zealand with Great Britain; Australia is also making strong efforts to share the trade with New Zealand. It must be admitted that with cheaper land, and a closer proximity to the markets of the world, Argentina will necessarily be a very formidable rival with Australasia. The sheep-farmers are becoming alive to the value of Down sheep for crossing purposes: they pay as much as six guineas per head for Shropshire ewes and twenty-five to fifty guineas for Lincoln rams. The only way to keep command of the market is to produce nothing but first quality mutton and lambs.

Raising lambs for the frozen-meat trade has become one of the mainstays of colonial farmers, large and small, especially the latter.

Like butter and cheese, the returns are ready cash. The magnitude of this industry may best be estimated by the fact that last year the colony sent away 792,037 lambs, valued at 9s. each, equal to £358,167. This, coupled with over a million and a half of sheep, is sufficient evidence of the great and important changes which have come over the agricultural industries of this colony—a condition of things which has brought about a system of farming calculated to develop to the utmost the resources of the country. Approximately, 515,000 acres are annually devoted to root-crops, of which 408,668 acres were in 1896-97 under turnips, and 63,607 acres in rape, for feeding sheep.

The determination of Australian flock-masters to cut into the frozen-meat trade has given rise to a demand for our long-wool sheep of superior quality; New Zealand breeders have consequently been enabled to extend their operations beyond their own borders; and although the trade may not prove a very extensive or lasting one, it will give encouragement to those who have spent time and money in building up their now famous stud-flocks.

"The New Zealand Flock-book," published in 1895, is now thoroughly established, and, with careful management, must prove of great service to owners of pure pedigree flocks.

The hope of opening up a market for stud rams in Australia, of which flock-masters were so sanguine a couple of years ago, appears to have completely failed. The disastrous results of the Sydney sheep-sales of 1895 have completely dispelled any hopes which were entertained on that point. It is not quite easy to understand this, except, indeed, it may in some degree be attributed to continued droughts; and again, some blame may fairly be attached to owners themselves, who flooded the market with sheep of questionable quality, completely spoiling the sale of the better class of animals. There will always be a certain demand for sires bred in New Zealand, for the reason that this climate is probably better suited than the Australian for producing robust and hardy animals. It may be well here to correct an erroneous impression which has been fostered in some quarters, and appears to have gained credence in the minds of some sheepowners in Australia. It is to the effect that "merino ewes cannot lamb to Lincoln rams;" and as one fact is worth one hundred theories, the following will serve to set the matter at rest: Mr. H. Overton, Highfield, Kirwee, some time ago purchased a draft of strong merino ewes and put some of his stud Lincoln rams to them; the result was that from 210 ewes he tailed 234 prime lambs, which averaged him £1 per head; thus showing the fallacy of the idea above referred to.

Horse-breeding.

The climate of New Zealand is admirably adapted for the breeding and rearing of horses of all kinds, especially draught-horses. Indeed, it would be difficult to find better Clydesdale horses than those bred on the limestone soils of Oamaru and elsewhere. Some

of the best blue blood of this breed has from time to time been imported from Scotland, with the result that the breed is now well established in the colony. The rise in the price of cereals has created a demand for this class of horse, and remunerative prices can readily be secured for really good stock.

The light-horse stock of the colony has risen into note through the production of animals which have rendered themselves famous on the Australian turf. The demand for horses suitable for remounts for the cavalry service in India is a continuous one, affording a ready market for the proper stamp of animal. Shipments have from time to time been made to that country. The importation, however, of a few really good sires for the production of carriage-horses, hunters, and hacks would be a national benefit.

Cattle.

The colony possesses all the best strains of blood, and this is evidenced by the superior class of cattle to be met with throughout the settled districts, especially in the show yards. There are two Herd-books published by the Canterbury Agricultural and Pastoral Association—one for shorthorns, the second for breeds other than shorthorns; the third volume, of other breeds, contains 1,200 new entries. New Zealand is free from any of the diseases so disastrous to horned stock in other countries. It is said that Iceland is the only other spot on the earth which enjoys the same immunity. With a view to maintaining this enviable position, the Government have prohibited vessels carrying live-stock from infected colonies touching at any of the ports of New Zealand except under certain conditions. This action is deemed necessary, owing to the prevalence of pleuro-pneumonia in Australia.

Dairy Stock.

The breeding of first-class dairy stock offers a field for profitable investment. Milking-cattle now command a fair price, and will continue to do so. The rearing of well-bred heifer calves will repay all the time and trouble bestowed thereon. They must, however, be of exceptionally good quality and from fine milking strains. Separated milk, although relieved of its butter-fat, loses little of its feeding value; the addition of a little linseed meal will restore the fatty constituents, which, however, are not the most valuable for feeding purposes. Ground oats, wheat, or barley added to the linseed mucilage will render calves fit for the butcher in a comparatively short time. An acre or so of European flax should be grown upon every farm where stock-rearing is carried on. The fattening of calves for export has not yet been attempted in the colony, although there is a very large and lucrative market for veal calves in London, ranging from £4 to £6 and £7 per head. Much has still to be done in the way of improving the dairy stock of the colony. The yield of milk from fairly good milking-cattle is approximately 500 gal. per annum, although 700 gal. per head are frequently obtained

from selected herds. The average quantity of milk obtained will no doubt be increased as more attention is paid to breeding, and proper feeding. The general management and feeding of dairy stock is a question demanding immediate attention. Kind treatment is essential to success; clean pastures, clear running water, and grasses of the best quality are all factors, fully recognised wherever dairying is successfully carried out.

The average yield of butter from milk passed through the separator is 1 lb. for every 2½ gal. of milk of 10½ lb.; so that the average cow produces annually 200 lb. of butter, or 500 lb. of cheese, which, estimated at 4½d. per pound, will be worth about as much as the butter.

The Dairy Industry.

This business has now developed into one of the settled industries of the colony, the Government having spent considerable sums of money in the introduction of dairy experts, whose business is to instruct the dairy farmers and factory owners in all the most approved methods of butter and cheese manufacture. Graders are employed examining all butter and cheese for export, who brand each packet with its proper quality. Factory owners had better recognise the fact that it is folly to pay freight on any but the best kind; and this remark applies to grain and meat as well. We have to compete against Canada, the United States, Denmark, Australia, and the Argentine. Mr. McEwan, the late Government Dairy Expert, thinks that the days for very high prices have gone for ever. It is probable, he thinks, that butter will rarely range higher than £5 per hundredweight, and cheese £2 5s. per cwt. New Zealand dairymen must endeavour to raise dairy cattle which will yield the maximum of milk of the best quality; in fact, nothing but intense farming will pay in the future, applied to every branch. Factory owners must acquire a knowledge of the chemistry of their business.

The Danish Government maintains a splendid laboratory and staff of professors, chiefly for the study of ferment in butter and milk; and almost all the milk sold is pasteurised. Everything connected with the industry is conducted on scientific principles. The object of sterilizing or pasteurising milk is to destroy the germs of diseases such as tuberculosis, &c. At the present time there appears to be a craze almost amounting to a panic as regards the danger of using the milk of cows affected with tuberculosis. How far the danger extends is difficult to determine. Be this as it may, the sterilizing of milk is a wise precaution. The operation consists of heating milk up to a certain temperature and cooling it rapidly, a process which has been found to destroy the bacillus of tuberculosis known to be present in the milk of affected cattle. The Government veterinary surgeons are employed examining all suspected cattle, and treating them with the tuberculine test. The following extract from Mr. G. Pentland's (Stock In-

spector) report to the Minister of Agriculture in Victoria is interesting and instructive. He says that "tuberculosis is not confined to cattle or man, but it attacks other animals as well — notably the pig, and poultry—and sanitary precautions should be extended as far as practicable in each case, as there is a risk of infection being conveyed from one to the other, from animals to man and from man to animals. Sunlight is very destructive to the bacilli of tuberculosis, and it therefore follows that all milking-sheds and yards should be in the best possible position, as the success of minimising tuberculosis will greatly depend upon well-devised sanitary arrangements. All tested animals slaughtered and found to be badly affected should be burned, and not given to pigs and other animals. From a number of experiments made it has been found that injections of tuberculine have no bad effect on the quantity or quality of milk; whilst, on the other hand, it is stated by some experts that it will be safer not to use the milk until twenty-four hours have elapsed after injecting the tuberculine. Cows with tuberculous udders should be forthwith slaughtered and their carcases burned. The suppression of tuberculosis is imperative, and the co-operation of stockowners, in their own interests, will be the principal means to this end."

Pigs.

These useful adjuncts to the dairy should hold a very important position on almost all arable farms. The favourite breed in New Zealand is the improved Berkshire. The large and small breeds of White Yorkshire are also to be met with, but are not so generally approved of as the black pigs. Pigs require no better attention than a good grass paddock, with a liberal supply of roots, and a little unthreshed pea-haulm for a few weeks before killing, with plenty of water, and shelter from the sun during the warmest summer months.

The breeding, rearing, and fattening of pigs is a source of wealth which is capable of considerable expansion. Several plants for the mild curing of bacon have been set up at the various freezing factories, and by private persons and firms, many of whom are prepared to purchase an almost unlimited number of suitable animals, at prices which should prove remunerative to the grower. The establishment of properly appointed pig-farms is a somewhat costly undertaking, as all the fences must be pig-proof. Doubtless this consideration has had a deterrent effect upon some, while others find the breeding of lambs a sufficiently profitable undertaking, besides causing much less trouble. Mr. Vecht, a Continental expert who visited this colony a few years ago, expressed himself as quite satisfied that New Zealand possessed advantages superior to most other countries—a mild and open winter—while, for the Home market, being at the Antipodes gave us the advantage of the season, just as is experienced in the dairy produce. It is, however, satisfactory to note that the industry is growing, if not very rapidly.

The Fruit Industry.

From the North Cape to the Bluff Hill, in the extreme south of the Middle Island, the climate and soil are, for the most part, eminently adapted for the growth of a large variety of fruits. Generally speaking, pears, plums, quinces, apricots, figs, walnuts, cherries, gooseberries, currants, strawberries, and raspberries grow luxuriantly, producing abundant crops of fruit. In the Auckland District, oranges, lemons, and limes flourish: many groves are now bearing, and afford light and pleasant employment to a large number of persons. This employment will go on increasing as the trees become older. The olive flourishes in the North Island, bearing heavy crops, and the manufacture of oil will assume important dimensions at no distant date.

Vine-growing is also carried on with tolerable success in many districts; tons of fruit grown under glass are sold in the Auckland markets annually. Signor Bragato, an Italian wine expert, who visited this colony in 1895, gave it as his opinion that there are numerous localities in both islands admirably suited for growing vines for the manufacture of wine and raisins.

Away in the far north the banana grows and ripens its fruit, but it is not thought that it will ever enter into successful competition with those imported at so cheap a rate from the Pacific Islands.

Extensive orchards of apples have existed in Auckland for many years, and are still capable of producing an abundance of fruit, if kept free from codlin-moth and other pests. Orchard-planting is progressing, and must one day be a very important industry. Central Otago will also become a large fruit-producing district, being free from violent and scorching north-west winds. All the fruits of the temperate zones flourish there; all that is required is a light railway to tap the district.

The manufacture of cider is already assuming considerable dimensions, opening up a ready market for surplus fruit. The colonial-made article is rapidly coming into favour with the general public.

The drying of fruit has been fostered by the Government, who sent an expert through some of the apple-growing districts, giving practical lessons in the art of artificial fruit-drying. A great deal might also be done in bottling fruits, and the manufacture of fruit-wines, if only for home consumption. These are industries hardly yet touched, but as the orchards mature they may be expected to expand.

The manufacture of jam is carried on with much success, but there is plenty of room for further development in this industry.

Exporting Apples.

This trade has not yet assumed any great dimensions. New Zealand orchardists might well take a lesson from their brethren in Tasmania, who have developed a large trade with the London

market. Growers must, however, be reminded that it is folly to ship anything but the choicest varieties of dessert- and keeping-apples. The supply of locally-grown fruit, however, is not at present more than sufficient for local consumption.

Before the planting of fruit-trees was commenced on a large scale, with a view to the export trade, little attention was paid to the varieties selected. The result is that many bearing trees have proved unsuitable to the new requirements, and are now being cut down and regrafted or replaced with more suitable kinds. According to latest advices, the following varieties of apple are said to be in good demand in the London market, always commanding a quick sale at good prices: Ribstone Pippin, Cox's Orange Pippin, Waltham Abbey, Sturmer Pippin, Scarlet Pearmain, Adam's Pearmain, and New York Pippin. The soil best adapted for growing apples is a strong loam with a clay subsoil; but they will thrive in almost any kind of soil, provided it is in good heart and that water does not stagnate in the subsoil.

Owing to the comparative mildness of the New Zealand climate, all kinds of fruit-trees are forced into bearing at an earlier period than in Great Britain.

Tree-planting.

With a view to encourage the planting of trees, the Government some four years ago introduced the popular American institution of Arbor Day. It is, however, a matter for regret that New Zealand settlers have not as yet entered into the spirit of the institution, as it was hoped they would. Millions of trees have been planted in this way in the United States. Our native forests are fast disappearing before the woodman's axe; it is only a question of time, and supplies will have to be drawn from artificial forests, or from foreign sources. Deciduous trees, such as ash, elm, and beech, should be largely planted. A small quantity of ash grown in Canterbury has already come into use for coach-building, and has been pronounced by competent experts to be of excellent quality. Plantations of larch might advantageously be made on the southern slopes of the foot-hills skirting the Canterbury Plains and elsewhere. There can be no doubt that a demand will arise for large quantities of larch-poles for mining purposes, &c.

Prospects of Small Farmers.

Those who have watched the course of events in other countries, so far as they affect the agricultural interests of New Zealand, have come to the conclusion that New Zealand will have to pay greater attention to the quality of her agricultural exports than has been given to them in the past. Our farmers cannot hope to compete with such countries as Australia and South America, where land is so much cheaper, and where mutton and beef of good quality can be produced; for cheap meat these must command the markets of the world. Happily for New Zealand, our climate and pastures are such

that we can not only produce mutton equal to the finest English or Scotch, but we can produce more per acre than can be done in Australia. Our dairy produce should be second to none. Unfortunately, however, that care which is indispensable in the manufacture of butter has not been exercised, consequently our exports have not fetched such satisfactory prices as they might have if put on the market in the best manner and of the best quality. It is suicidal to neglect the conditions under which butter of first quality can be made. Second-class butter comes into competition with margarine and similar compounds.

Owing to her humid climate and fertile soil, New Zealand is peculiarly well adapted for small holdings. Men of slender means can easily make homes for themselves and their families, always provided they know something of the work they undertake, and are, with their families, willing to work hard and live frugally for a few years. It is quite possible for a man with a few cows and pigs, together with poultry and bees, to make a good living, as markets for these products are now being opened up in England. And there is a good local market if the goods are properly prepared. There is also a continuous demand for the supply of coastal and ocean-going steamers. The facilities now given for obtaining money at reasonable rates offer great inducements to persons to settle upon the land. There are thousands of acres in the North Island adapted for farming, and much land there is being taken up. The advance in prices for farm produce which has taken place during the past year will, it may fairly be assumed, stimulate the settlement of the lands throughout the colony.

Conclusion.

A few of the salient points have now been enumerated which go to prove conclusively that, as a country for settlement, New Zealand is not surpassed by any British possession, being one where the industrious man with moderate means can live with much comfort. The land, it is true, is dearer in some districts than that which may be found in South America, South Africa, or Canada, but this difference in price is far outweighed by other considerations, such as superiority of climate, and security to life and property. Pit these advantages against against the insecurity of life and property in South America and South Africa, or the rigour of Canadian winters, and the balance will be immensely in favour of New Zealand. Another great advantage enjoyed by the agriculturist of New Zealand is that he is nowhere far from the sea-board, giving him the benefit of cheap water-carriage for his produce to the markets of the world.

The foregoing notes would hardly be complete without some reference to the prevalence of small birds. Amongst other birds, the English sparrow was introduced to New Zealand some five and twenty years ago. Many of the early settlers remember his first appearance, and the pleasurable feelings elicited by the sound of his

once familiar chirp, awakening reminiscences of the Old Land. New Zealand is singularly destitute of the feathered enemies of small birds, and, owing to this and the genial climate, the sparrow and other birds have long since become so numerous that drastic methods have to be adopted to preserve the balance of power. Large sums of money are paid annually by the Road Boards for the destruction of small birds. The want, however, of concerted action on the part of farmers at the time of poisoning is responsible for the undue increase of the pest. While treating small birds as pests, it must not, however, be forgotten that before their advent farmers suffered very heavy losses from the periodical attacks of caterpillars, which frequently devastated their barley and oat crops, and that the birds are the farmers' friends in this matter. It must also be remembered that the birds live for about nine months in the year on insects and seeds of weeds; so that if accounts could be squared they would not be such debtors after all. All that can now be done is to keep them in check.

THE DAIRY INDUSTRY.

By C. W. Sorensen.

The dairy industry of New Zealand is now one of the most important branches of the colony's agriculture, the dairy produce exported during the year 1896–97 ranking fourth in value amongst the exports of all sorts from the colony. The returns show that the decrease both in quantity and value which took place in the exports of butter and cheese for 1895–96 as compared with the previous year, was only an accident, due solely to the unfavourable nature of the weather during the winter and spring of 1895. In 1896–97, the exports not only recovered the 15,000 cwt. they had lost in 1895–96, but were 2,000 cwt. in excess of what they were in 1894–95. The declared value of the butter shipped during the last financial year was £297,518, and of cheese £135,711, or a total of £433,229. It is anticipated that the season 1897–98 will witness a substantial increase in the exports of both butter and cheese, and that the value will exceed half a million sterling. Dairymen in New Zealand are commencing to realise the fact that the high prices of a few years ago are a thing of the past, and that the prices of the present no longer permit of the somewhat primitive methods of those days when a fair profit could be easily earned; the fact that the cost of production must be proportionately reduced if they are to derive the same income from their dairies; that the quality of their produce must be all "finest," and, that only by the employment of the latest machinery and processes, a thorough knowledge of the underlying principles of the business, and co-operation, can these essentials to success be attained.

Natural Advantages.

New Zealand has been called the Denmark of the southern hemisphere, but the comparison cannot be considered a happy one. In most respects New Zealand, as a dairying country, has the advantage over her northern rival. With us the climate necessitates no stall-feeding for six months out of the twelve; no costly barns or stables, with all the expense of attendance. Nor need we upset the natural order of things, by causing the calving season to fall in autumn and winter, so as to have the bulk of our output to arrive at Home while winter prices rule. Winter in Europe being summer with us, we are

enabled to produce large quantities of cheap grass-butter just when it is in most demand. In the matter of soil, too, Denmark cannot be compared to New Zealand, either as regards price or general quality. In no part of New Zealand is it necessary to cart water to the cows throughout the whole summer, as has frequently to be done in flat and ill-watered Denmark. Only in two items can the Danes claim the advantage over New Zealand: in proximity to the London market, and in the cheapness of labour. Refrigeration assists us to a great extent to counterbalance the former, and labour-saving machinery helps to compensate us for the latter. For instance, in an average butter factory in New Zealand two men will handle the milk of 600 or 700 cows, whereas at a Danish factory of similar size, four, and possibly five, hands would be employed.

Cost of Production.

Notwithstanding our natural advantages, the future of the industry depends upon our ability to land in the British market a finer article than any one else, and at a less cost. We cannot control the market price of butter or cheese, but we can, to a large extent, reduce the cost of production to such a point that the market price will leave us a reasonable margin of profit. In the days of 112s. per hundredweight for butter and 60s. for cheese, the cost of producing a pound of either was sufficiently low to leave a very good margin. But now that the average price of butter is 10s. or 12s., and of cheese 8s. or 10s. per cwt. lower, either the cost of production or the margin of profit must be reduced. The fact that the exports of dairy-produce continue to increase in spite of the fall in prices shows that the margin of profit is still wide enough to encourage production. The industry will probably keep on increasing, for the reason that, as the main factor in the cost of production is the capacity of the cow herself, and as the average capacity of our cows is at present a low one, which could without great difficulty be nearly doubled, it follows that the present cost of production can be proportionately reduced. We may, therefore, be justified in looking ahead with confidence in the belief that whichever of our rivals may eventually be forced out of the field of competition, New Zealand will be amongst the last to leave it.

The Dairying Districts.

The principal districts in which dairying is carried on to any extent are Taranaki in the North and Otago in the Middle Island. The former is undoubtedly best suited by nature for successful dairying by reason of its mild climate, its copious rainfall, its splendid grazing land, and its countless streams of clear, quick-flowing water. But although nature has given her all these advantages, the enterprise and energy of the Southern settlers has placed the industry on an equally firm basis. A considerable amount of dairying is also carried on in the Waikato, the Wairarapa, and the Forty-mile Bush districts of the North, and in Canterbury in the Middle Island. The factories are distributed throughout the colony as follows: Taranaki, 81; Otago, 63; Auckland, 50; Wellington, 48; Canterbury, 26; Hawke's Bay, 10; Nelson, 4; Marlborough, 3; Westland, 3: total, 288. As there were only seventy-four factories in the colony in 1891, the rapidity of the trade's growth is obvious, amounting as it does to an increase of 289 per cent.

Winter Dairying.

Until recently it has not been customary with North Island dairymen, especially in Taranaki, to provide any winter feed for their stock, the grass alone being considered sufficient. Nor was it at all usual to milk any cows during the winter months except such as were necessary for domestic supply. Six or seven months constituted the milking season, and if the cows were not all dry about the end of March, they were summarily dried off and turned into the bush for the winter. Competition, however, has of late enforced better economy, and most dairy-farmers now grow hay, ensilage, or roots to supplement the pasture during the three or four months when the growth of grass is checked. Better milking-sheds and cow-yards have been erected, and cows are now milked for a longer period than formerly. Many of the factories now receive milk all the

year round, which until recently they could not do, partly because of the bad state of the roads in the wet season, and partly because of the insufficiency of the available milk-supply.

The Factory System.

The factories are worked in two ways: either they are owned and managed by the milk-suppliers on co-operative principles, or by private individuals or syndicates. In the former case, the suppliers receive an advance each month against all milk supplied, the funds being provided by drawing on the company's London agents against shipments, and after payment of all working expenses, including interest on paid-up capital and overdrafts, and provision for reserve fund, any balance is distributed among the milk-suppliers *pro ratâ* to the value of the milk supplied by them. Where the factories are owned by private individuals, a fixed price, as mutually agreed on, is paid for the milk, the proprietors, of course, taking all risks of manufacturing and marketing the produce. Given capable management, co-operative dairy-factories have proved a great success, and the system is growing in favour. The proprietors of private factories, however, speaking generally, and considering the risk involved, have paid and do pay their suppliers full market value for the milk purchased. Indeed, as things are now situated, they must do so, otherwise the suppliers will form co-operative companies to run the factories for themselves. The average price paid by the principal proprietary concerns last season was from 2¾d. to 3d. per gallon, with skim-milk returned free; while the co-operative factories' returns were slightly higher, ranging from 3d. to 3¼d. per gallon, or 8¼d. per pound of butter-fat.

The Dairy Cattle.

The dairy cattle of the colony are for the most part mixed shorthorns and Ayrshires, but since the adoption of the system of paying for milk according to its richness in butter-fat, the Jersey strain has been largely introduced in order to improve the quality of the milk. Particularly in the North Island have the Jerseys gained favour with dairymen, probably on account of the mildness of the climate being conducive to the development of their milking qualities. It is found that calf-raising is not now so profitable as formerly, and the majority of our farmers now only raise such heifer-calves as may be necessary to keep up their dairy-herds, devoting the rest of their skim-milk or whey to pig-feeding.

Utilisation of By-products.

The by-products of the factories—namely, the skim-milk and butter-milk of the butter-factories, and the whey of the cheese-factories—are either returned to each supplier *pro ratâ*, or the whole season's output is sold to the highest bidder, or else is utilised for pig-feeding on or near the premises, the profits being divided amongst the suppliers. At the butter-factories it is customary for each supplier to take back his share of skim-milk, while the buttermilk is usually sold to the highest bidder at a price ranging from ½d. to ¾d. per gallon. The skim-milk is considered of almost equal value to the buttermilk for feeding purposes, the whey being worth about half as much as skim-milk. On this account proprietary factories generally pay ¼d. per gallon more for milk for cheese-making than for butter-making, by way of compensation for the diminished value of the whey as compared with the skim-milk. Bacon-curing factories are established in most parts of the colony, which purchase the pigs alive from the grower, paying 3d. per pound, less 25 per cent. for offal. This is a good payable price, and if it can be relied on to continue will soon cause a general extension of the industry. No doubt the co-operative principle will before long be applied to the bacon-curing factories, as has been so successfully done in Denmark. The market for bacon of prime quality is far from being overdone, while the export of frozen pork to the Old-country has not yet been more than started. The best utilisation of the by-products is one of the most important questions in all manufactures nowadays, and in many cases the whole of the profits are derived from this source. The Danish butter-trade may be said to practically depend on the profitable employment of the by-products, and, although New

Zealand dairying has not yet reached that stage, we cannot afford to neglect so important an adjunct to success. The day may come when without it we shall fare ill in the struggle for possession of the British dairy-produce market.

Government Aid.

It is now fifteen years since the Edendale Factory claimed the bonus of £500 offered for the first fifty tons of cheese exported from the colony. Since that time the work of the Department of Agriculture in connection with the dairy industry has assumed large and increasing dimensions. The staff of experts now at the disposal of the public includes instructors, whose duties are to visit the factories, and, by practical demonstration and advice, show the managers how to remedy any defects in the quality of their output; to deliver lectures on dairy matters to settlers; to furnish plans and estimates for new factories; and generally to assist in the development of the industry wherever possible. At the ports of shipment, all butter and cheese is examined and graded by the Government graders, who promptly issue a report on each parcel to the shipper. Any faults of manufacture or packing are thus at once pointed out, whereas without grading nothing would be known of them until the London agent's report was received, with the account sales, some three or four months later. Prior to the system of grading, it not unfrequently happened that some serious defect in quality, which might easily have been remedied, continued from month to month, almost the whole season's output being spoilt simply because the directors of the factory concerned had no means of ascertaining whether the work of their manager was good, bad, or indifferent. The present method of inspection prevents any such possibility, and if the quality of any brand is not up to the mark, it is not for want of expert opinion as to the weak point, nor for lack of competent advice as to the remedy. The best testimony as to the accuracy of the graders' reports is furnished by the fact of the agents of several London firms buying or making advances against butter according to the grade. The Dairying Service of the Department of Agriculture also issue bulletins or leaflets on matters of interest to dairymen; and some idea of the work involved may be got from the statement that there are nearly seven thousand milk-suppliers on the department's mailing-list.

WATTLE-GROWING IN THE AUCKLAND PROVINCIAL DISTRICT.

Supplied by the Department of Agriculture.

This industry was started some eleven or twelve years ago. About that time the Government decided to sow a block of land at Wairangi, in the Waikato County. The area selected contained some 1,200 or 1,300 acres of ridgy land, of poor soil, and covered with tea-tree scrub. A portion of it was ploughed, and sown with different species of gums.

Another block was sown principally with silver wattle (*Acacia dealbata*). This species has been found to produce bark of a poor tanning quality, and therefore has, as far as possible, been replaced with *Acacia decurrens*. A few oaks were also planted, but neither they or the gums have proved a success. Some four years ago the gums still alive were cut out, the land reploughed, and sown with black wattle (*Acacia decurrens*). There are now 600 to 700 acres in wattles.

Besides the above-mentioned species, there is also the golden wattle (*Acacia pycnantha*), but although yielding a higher percentage of tannin it does not form a fair-sized tree, and is more difficult to strip.

The usual course in preparing the land is to fell and burn the scrub, then plough, and work down with the disc-harrow. The seed is sown in October, at the rate of ¾ lb. to 1 lb. per acre, with a drill, in rows about 4 ft. apart. The seed must be scalded before sowing. The cost per acre may be estimated as follows: Clearing and burning, 7s. 6d.; ploughing, 7s. 6d.; disc-harrowing (one stroke), 1s. 3d.; sowing, 9d.; seed (1 lb.), 2s.; harrowing, 1s.: total cost per acre, £1. It is, however, better to give the land a second ploughing after it has been lying for a few months, and this will increase the total cost by 6s. or 7s. per acre. A trial has been made by sowing 1 cwt. or so of bonedust with the seed. Trees thus treated two years ago are now quite as far advanced as those sown four years ago without manure.

The returns may be estimated as under—

				£	s.	d.
10 tons green bark per acre, equal to 5 tons dried bark, at £5 15s. per ton				28	15	0
Cost of stripping, 10 tons at £1 ..	£10	0	0			
Weighing, carting, and storing, 10 tons at 2s. 6d. per ton	1	5	0			
Railage on 5 tons, at 5s. per ton ..	1	5	0			
				12	10	0
				£16	5	0

No allowance has been made for rent, interest, &c.

The wattle-tree comes to maturity in about nine years, when a complete stripping is made; but during the intervening period the plantation requires to be thinned, and sufficient bark will be obtained to cover any expense.

By way of experiment about 120 acres were sown last December with turnips, on what was practically the first furrow, with 2 cwt. of bonedust. An excellent crop has resulted, and is now being fed off with sheep. The paddock will be reploughed and sown with wattles in October. Another block is being sown with rye, dun oats, and Cape barley separately. In another year the whole block will be under wattles.

It is important that fire-breaks should be left throughout the plantation.

There are now some 4,500 acres under wattles in the Auckland Provincial District.

THE WAIHI GOLD-MINING COMPANY.

By P. GALVIN, Secretary of the Mining Bureau.

THIS company's property is situated at Waihi, in the County of Ohinemuri, and is about eighty miles distant by land and sea from the City of Auckland. The company was registered in 1887, and up to the 31st December, 1896, had called up £106,667, and returned in dividends £180,500, the total value of the bullion obtained to that date being nearly half a million sterling. In 1890 the company acquired the Martha Special Claim, in which there are three valuable lines of reef—the Martha, Welcome, and Surprise. The average width of the Martha reef is 28 ft. to 30 ft., and the Welcome 12 ft. to 15 ft. Two shafts have been sunk, No. 1 to a depth of 267 ft., and No. 2 to a depth of 415 ft. The No. 2 shaft has been equipped with very powerful pumping and winding machinery, estimated as capable of lifting 1,000 gallons per minute from a depth of 1,000 ft. The extent of the work carried on at the mine is shown by the following figures :—

Distance driven,—	Number of Feet.
Above the adit-level	6,625
At the adit-level	6,725
No. 1 level	4,700
No. 2 level	3,867

Or a total of 4 miles 265 yards, up to 19th June, 1897.

The reduction-works, which are lighted by electricity, are more than half a mile from the mine, with which they are connected by tramway. The battery at first consisted of thirty stamps, but the number was increased to sixty and afterwards to ninety heads, which are kept continuously at work. The mill is for the most part driven by water-power, obtained through two race systems extending a distance of about 14 miles ; but steam-power is also available when required. The cyanide process has been exclusively used since May, 1894, and saves about 90 per cent. of the bullion contents of the ore, as against 66 per cent. saved by pan amalgamation, which had been the method adopted up to that time. The cyanide plant consists of twenty-four wooden vats, of a diameter of 22½ ft., each capable of taking 30 tons of dry crushed ore, put through a thirty-mesh screen ; and eight vats of 20 ft. diameter are to be added. The ore is first roasted in a kiln, then passed through a crusher, from which it is trucked to the ore-bins, and thence passed through automatic ore-feeders to the battery. Several lines of tramway have been constructed to the bush for conveying supplies of firewood for roasting the ore and generating steam.

New and extensive buildings are now in course of erection at Owharoa, which is distant about five miles and a half from the mine. Sufficient water-power can be obtained at the new site, by means of peltons and turbines, to run the whole mill. A substantial tramway has been laid down, and a locomotive will run between the mine and the mill. The new battery is to consist of one hundred

stamps, and the building and plant have been so designed that a further addition of one hundred heads can be made when required without necessitating any radical alteration in the general plan of the works.

The steady onward progress of the Waihi Mine can be estimated from the following figures :—

Year.	Tons of Ore treated.	Value of Bullion. £ s. d.
1892	18,236	44,888 2 4
1893	19,805	61,900 10 11
1894	24,864	82,827 2 2
1895	33,670	120,334 2 2
1896	34,440	137,321 8 2
1897 (first six months) ..	20,004	67,052 19 10
	151,019	514,324 5 7

The value of the bullion obtained in 1890 was £21,112 13s. 6d., and in 1891, £23,935 5s. 11d., the total for seven years and a half being £559,372 5s. Up to the 30th June, 1897, seventeen dividends have been declared, and £212,500 paid to the shareholders. The number of men employed is about 500.

THE THERMAL-SPRINGS DISTRICT, AND THE GOVERNMENT SANATORIUM AT ROTORUA.

By A. GINDERS, M.D., L.R.C.P. (D.P.H., Cantab.), Medical Superintendent, Rotorua Sanatorium.

CLIMATE OF ROTORUA.

THE geographical position of the North Island of New Zealand will naturally suggest something of the character of its inland climate at an elevation of 1,000ft. Rotorua is some forty miles from the coast. Its elevation is 990ft. above the sea-level. The atmosphere is drier and more bracing than on the coast—in winter considerably colder, and in summer perhaps somewhat hotter, but of a dry pleasant heat, free from the moist oppressiveness which characterizes the summer heat of Auckland and other coast towns. The mean temperature of spring is 53°, of summer 66°, of autumn 57°, and of winter 45°. The relative moisture of the air for the four seasons (taking complete saturation at 100°) is—for spring, 74°; for summer, 66°; for autumn, 67°; and for winter, 74°. The steam which rises so abundantly and perpetually all over the district no doubt adds considerably to the moisture of the atmosphere. This was clearly shown in the month of June, 1886, when the great eruption of Tarawera took place. The relative moisture for that month was 10° in excess of the average, owing to the immense amount of vapour caused by the eruption. The rainfall for the year is about 50in., and

the number of days on which rain falls about 140. Auckland has 18in. less rain, and thirteen more rainy days. The daily range of temperature is greatest in the summer and least in the winter. This obtains throughout the whole of New Zealand, and is, indeed, one of the most charming features of our climate. No matter how hot a summer's day may be, the nights are invariably cool. The mean daily range of temperature for spring is 21°, for summer 28°, for autumn 23°, and for winter 20°.

These annual means, it must be remembered, are based on observations extending over seven years only, and consequently have no more than a relative value. For example, the rainfall for the six years ending with the year 1891 averaged 50in. per annum, but in 1892 it was 67in., and in 1893—an exceptionally wet year—it reached 93in.; so that for these averages to have an absolute value they must be based on observations extending over a far longer period. The annual mean temperature for 1894 was 55°, and the rainfall 55·22in.

The annual means for the year ending 31st March, 1897, stand thus: Mean barometer, 29·41°; mean maximum shade temperature, 66·3°; mean minimum shade temperature, 44·8°; mean annual temperature, 55·5°; mean daily range, 21·0°; mean solar radiation, 113·6°; mean terrestrial radiation, 38·9°; mean relative moisture (saturation = 100), 76·6°; total rainfall in inches, 69·35; total days on which rain fell, 167; mean amount of cloud (0, clear sky; 10, overcast), 5·7.

The most agreeable months of the year for an invalid to visit Rotorua are February, March, and April; the least pleasant are August, September, and October; but, as there is ample boarding accommodation close to the baths, the invalid is virtually independent of the weather. A climate better adapted to the necessities of the class of patients visiting this health-resort could not be desired. They are, as a rule, persons in fairly vigorous health, in whom it is desirable to maintain the normal power of adaptation and resistance to climatic changes. A climate in which the same conditions prevailed for long periods of the year would fail to secure this end; but one in which the various factors of temperature, moisture, light, electricity, wind, and atmospheric pressure are subject to moderate variations is, in every way, the one to be desired.

It is most desirable that invalids visiting Rotorua should be well informed as to the character of our climate. I have found that considerable misapprehension exists on this point, particularly amongst our visitors from Otago and Southland, their impression being that Rotorua is a very warm place, and that in summer they have to bring only the lightest possible clothing. This is a great mistake, as will be understood at once when I say that in February and March it is not uncommon to find in twenty-four hours a thermometric range of 100 degrees between the solar and terrestrial radiation temperatures. Our visitors, therefore, should

provide themselves with both light and heavy clothing, no matter at what season of the year they may arrive.

Area of Thermal-springs District.

The Thermal-Springs District of New Zealand comprises an area of upwards of 600,000 acres, or close on 1,000 square miles. The length of the district is some fifty miles, with an average breadth of twenty miles. Its altitude varies from 1,000 ft. to 2,000 ft. above the sea-level.

Physical Features.

The most striking physical features of this region are the extensive pumice-plains, intersected in various directions by high ranges of igneous formation, which are relieved here and there by enormous trachytic cones. Forests of extraordinary luxuriance and beauty clothe the mountains and border the extensive plateaux, while hot lakes, boiling geysers, and thermal springs are dotted far and wide over the country. The Thermal-springs District, however, as defined on the maps, by no means embraces the whole volcanic and hydrothermal activity of the island. Although the volcanic slopes of Ruapehu and Tongariro bound this region on the south, hot springs are found here and there for fully 250 miles beyond its western boundary—in fact as far north as the Bay of Islands. Within the district it is no exaggeration to say that hundreds of hot springs exist, to say nothing of mud-volcanoes, solfataras, and fumarolës.

Varieties of Mineral Waters.

These springs are of the most varied chemical character, and of every degree of temperature from 60° to 212°. Numbers have yet to be submitted to analysis. Those which have been examined in the laboratory of the Geological Survey Department in Wellington are divided by Sir James Hector into five classes: (1) *Saline*, containing chiefly chloride of sodium; (2) *alkaline*, containing carbonates and bicarbonates of soda and potash; (3) *alkaline-siliceous*, containing much silicic acid, but changing rapidly on exposure to the atmosphere, and becoming alkaline; (4) *hepatic*, or *sulphurous*, characterized by the presence of sulphuretted hydrogen and sulphurous acid; and (5) *acidic*, containing an excess of sulphuric or hydrochloric acid, or both. In addition to these we have saline waters, containing iodine, cold acidulous chalybeates, and saline acidulous chalybeates. These, however, are in situations at present inaccessible to the invalid, or, if not out of reach, at least destitute of the conveniences and comforts essential to the sick, but they are no doubt destined in the near future to attain a high medical reputation.

The Rotorua Sanatorium: Names of the Principal Baths.

The Government of New Zealand has very wisely chosen the southern shore of Lake Rotorua as the basis of operations for open-

ing-up this wonderful district. Here are grouped together numerous examples of the five classes of springs I have mentioned, and here the Government fixed their first sanatorium and bathing establishment. The sanatorium reserve at Rotorua comprises an area of some 50 acres, bounded on the north and east by the lake, and on the west and south by the Township of Rotorua. Twelve years ago this was a howling wilderness, covered with manuka scrub, and diversified only by clouds of steam rising from the various hot springs. Here the adventurous invalid of that day had to pitch his tent, and be satisfied with a hole in the ground for a bath; and if the spring he wished to use happened to be too hot for his purpose he probably had to dig the hole for himself, and regulate the supply and temperature of the water to the best of his hydraulic ability. In many instances he immortalised himself by giving his name to the spring—a name still retained. Thus we have "Cameron's Bath," "McHugh's Bath," "Mackenzie's Bath," and "The Priest's Bath." Other springs have received their names from some real or imaginary quality. Thus we have "Madame Rachel," "The Pain-killer," "The Coffee-pot," and "The Blue Bath." Now this scene of desolation is completely transformed. Walks and drives planted with evergreen trees traverse it from end to end, fountains—amongst which are the artificial intermittent geysers constructed by the late Mr. C. Malfroy—and flower-gardens delight the eye, and commodious buildings for the entertainment of invalids are springing up on every side. The principal of these are the Sanatorium Hospital, the medical residence, the Priest's Pavilion, the Rachel Pavilion, the Ladies' Swimming-bath, the Blue Swimming-bath (to which is attached the sulphur-vapour bath), and Brent's boardinghouse.

Considerable improvements in the way of extended accommodation have been carried out, both at the Swimming Bath and at the Rachel Pavilion. From the former the natural sulphur-vapour bath has been separated, and made a distinct department, so that it may be used by ladies while gentlemen occupy the swimming bath, and *vice versâ*. At the Rachel Pavilion, four new private baths have been constructed, with two dressing-rooms attached to each. This is a distinct advance, enabling the attendant to put two bathers through the one bath in the time usually occupied by one bather when the bath-room is used both for dressing and undressing.

During the past season of 1896–97 the existing twelve private Rachel Baths, used chiefly in the treatment of skin affections, have proved quite inadequate to the demand upon them. The number of cases of skin-disease resorting to Rotorua for treatment is rapidly ncreasing: due, no doubt, to the remarkable cures of eczema effected here, and to the resulting change in the opinion of many New Zealand medical men as to the propriety of constant bathing for this disease. To meet the demands of next season at least eight additional private baths will be required, and, in order to keep them supplied, the whole of the outflow from the Rachael Spring must be conserved, which will necessitate additional concrete

cooling-pans. The filling of the Ladies' Swimming-bath with this water, together with two large public *piscinæ*, and say, twenty private baths, will tax the yield of this spring to the utmost.

At the southern corner of the Rachel Pavilion a large addition in the way of a ladies' swimming-bath has been constructed. It is 48 ft. by 24 ft., from 3 ft. to 4 ft. deep, and capable of accommodating twenty bathers at one time. Its capacity is 25,200 gallons, and its temperature will be maintained at about 96°. It is provided with dressing-rooms and shower-baths. This supplies a long-felt want, as the previous arrangement of having hours set apart for ladies to use the gentlemen's swimming bath was, for obvious reasons, unsatisfactory.

The most noticeable addition to our bathing accommodation effected recently has been the construction of the new sulphur baths. They are situated on the western shore of the lake, at a distance of about half a mile from the Priest and Rachel Pavilions, and are approached by a good carriage-drive. They consist of two large public *piscinæ* (each 24 ft. by 12 ft.) and four smaller ones (each 12 ft. by 10 ft.), one of the former and two of the latter being appropriated to each sex. There are twenty dressing-rooms, ten in each department. It has been found necessary to leave the baths open to the air, as the gases arising from them are apt to produce vertigo and fainting unless they are exposed to very free ventilation. In the summer weather they will be sheltered from the sun by canvas awnings. Recently verandahs have been built opposite the dressing-boxes, adding greatly to their comfort and convenience. The temperature of the spring supplying these baths is 114° Fahr., and the outflow varies from six to seven thousand gallons per hour. The water rises through a fissure in the rock of considerable length, and an efficient method of regulating the temperature was devised by our late ingenious engineer, Mr. Malfroy. It consists of a series of sluices, one of which is connected with each bath; if all the sluices are closed the water cools by natural radiation of heat, and if any sluice is opened the bath fed by it rises in temperature.

These baths are increasing rapidly in popularity as curative agents in all forms of rheumatism, gout, and neuralgias. There still are a few cases of fainting and involuntary muscular twitching, without loss of consciousness, among men using these baths. The women appear to enjoy a singular immunity from these troubles, due, most likely, to the gases arising from their baths being either less in quantity or different in quality. These baths are still incomplete in their appointments. A cold-water supply is urgently needed, that its pressure may be utilised for showers and douches. A female attendant and comfortable waiting-rooms are also very necessary.

The rules posted up in these baths for the guidance of bathers are as follows: "In order that these baths may be used in comfort and safety, bathers should observe the following rules: (1) Sit quietly in the water, so as to avoid any unnecessary disengagement of gases; (2) Do not sit immediately over any spot where gases are

rising through the water; (3) If any breeze is blowing, sit with the back to windward, that the gases may be blown from and not towards the bather; (4) Never remain in the water longer than fifteen minutes, and in the event of any disagreeable sensation coming on, leave the bath at once."

The Hospital.

The hospital, which was opened in 1886, was unfortunately destroyed by fire in November, 1888. A new and far larger building has lately been erected by the Government. It is designed to accommodate twenty-one patients—twelve males and nine females. The stipulations made by the Government with regard to admission are that the patient shall be able to show that his case is one likely to be benefited by the use of the baths, and that he is unable to pay the usual hotel or boarding-house charges.

The Regulations and Tariff.

The following is a copy of the regulations under which patients are admitted to the institution :—

1. Applications for admission of persons shall be addressed to the Resident Medical Officer at the Sanatorium, Rotorua.

2. No person shall be admitted (unless in accordance with Regulations 5, 6, and 7) except on the recommendation of the Hospital or Charitable Aid Board of the district to which he belongs, or of the Trustees of the benevolent society or hospital (if separate institutions) of the town in which he lives.

3. The charge for maintenance and treatment is £1 1s. a week.

4. The Board or Trustees, in making such recommendation, shall guarantee the cost of such patient, shall send him or her at their own charge to Rotorua, be responsible for his or her return-passage, and provide a sufficient supply of clothing. They shall also furnish a report on the case by a duly-qualified medical practitioner, in order that it may be seen whether the case is one that is likely to profit by treatment at the Sanatorium.

5. Members of any duly-registered friendly society may be admitted, on the recommendation of the lodge to which they belong, on the same terms as patients recommended by a Hospital or Charitable Aid Board, and Regulations 3 and 4 shall be read as applying to them in all respects: Provided that not more than three such persons shall be resident at the Sanatorium at any one time, and that all the hospital beds are not required by patients admitted under Regulation 2.

6. When all the beds are not occupied by patients admitted under Regulations 2 and 5, the Resident Medical Officer may at his discretion admit persons, being *bonâ fide* hospital cases, who have undertaken to pay 30s. a week for maintenance and treatment.

7. When all the beds are not occupied by patients admitted under Regulations 2, 5, and 6, persons may be admitted on the following conditions:—

(1.) That the Resident Medical Officer has certified that each such person is likely to be benefited by treatment at the Sanatorium.

(2.) That the expenses to and from Rotorua are provided by each such person, together with a sufficient supply of clothing.

(3.) That not more than four such persons shall be resident at the Sanatorium at one time.

8. The stay of each patient is limited to three months, but the Resident Medical Officer can, at his discretion, extend the period to six months.

This means, in brief, that patients sent by the Charitable Aid Boards of the country are to be admitted at all times at one guinea per week; that three beds may be occupied by members of registered friendly societies on the same terms; that not more than four free patients shall be resident at the same time; and that if all the beds are not occupied by the three classes of patients enumerated, the medical officer may, at his discretion, admit suitable cases paying for themselves at the rate of 30s. per week. Such patients, if they wish to avoid disappointment, should not leave their homes until they have communicated with the resident medical officer, and been assured by him that their cases are suitable, and that they will be admitted on arrival.

It should be distinctly understood that Hospital Trustees, or Charitable Aid Boards, or Friendly Societies recommending patients to this institution are held responsible for payment in case such patients are unable or fail to pay for themselves.

It cannot be too widely known that there is no private accommodation in this institution: whatever the regulations under which the patients are admitted, they are on equal terms; they take their meals together in the same hall; the women have their own sitting-room, and a dormitory containing nine beds; and the men have their sitting-room, and a dormitory containing twelve beds. Patients are admitted for three months, and if, in the opinion of the medical superintendent, a second period of three months is desirable, it is granted; but in all cases six months is the extreme limit.

The great object of this institution, as at present constituted, is to enable the Charitable Aid Boards of the country to send up for treatment a class of patients who would not otherwise be able to avail themselves of the springs, while at the same time in no way interfering with the private enterprise of hotel and boarding-house proprietors.

Analysis and Action of the Waters.

Patients who frequent our springs are always anxious to see the analysis of the waters in which they bathe, and are usually under the impression that they absorb into their systems the entire list of salts enumerated. This is an error. The body cannot absorb any salts from an aqueous solution. If the water, or any portion of it, is allowed to dry on the skin, a minute quantity of the constituent solids, of course, remains, which, through the friction of the clothing, becomes incorporated with the fatty elements of the integument, and is eventually absorbed. After a course of sulphur baths the underclothing is redolent of sulphur for some time after leaving the springs, and silver carried in the pockets becomes blackened, showing that a considerable amount of sulphur has been absorbed in the manner described. The shipwrecked sailor adrift in a boat finds his thirst relieved for a time by saturating his shirt with sea-water; if

he absorbed the salt his suffering would be only intensified, but the wet shirt, by temporarily checking the transpiration and evaporation of moisture from his body, affords him relief. The direct influence of hot mineral water used for bathing—apart from the effect of temperature—is twofold, according to its chemical character: it either excites and stimulates the nervous and vascular elements of the skin, as in the case of acid sulphur waters; or it exercises a soothing and emollient effect, as in the case of alkaline siliceous waters. We should never lose sight of the fact that the skin is the most important emunctory of the body; and that, as a means of maintaining its normal functional activity, bathing, well-advised and regulated, is the most efficient agent we can employ; and that in skin diseases especially our cures are brought about not by any absorption of fixed salts contained in the water, but by the prolonged maceration of the cuticle, causing the ready removal of the *débris* of dead and diseased cells, and their gradual replacement by cells of a more healthy character, due to the employment of a suitable regimen and the influence of a highly vitalising climatic environment.

Properties of the principal Bath Springs at Rotorua.

The following springs are those which have the most valuable properties, and whose therapeutic action is best known:—

1. *Te Pupunitanga*, or "*The Priest's Bath*," at Rotorua, only a few feet from the lake's edge; the water is strongly acidic and aluminous, depositing flocculent sulphur on the bed and sides of the bath; reaction, acid. It is considered the finest and most curative bath in the southern hemisphere. Analysis (in grains per gallon): Sulphate of soda, 19·24 gr.; sulphate of potash, traces; sulphate of lime, 7·41 gr.; sulphate of magnesia, 3·03 gr.; sulphate of alumina, 21·67 gr.; sulphate of iron, 1·24 gr.; sulphuric acid, 22·12 gr.; hydrochloric acid, 3·65 gr.; silica, 18·41 gr.—total, 96·77 gr.; also, sulphuretted hydrogen, 2·98 gr.; and carbonic acid gas, 2·16 gr. Temperature: From 98° Fahr. to 106° Fahr.; average, 99° Fahr. Special indications: Gout, dyspepsia, sciatica, skin diseases, disorders of the liver, sexual impotence, cold feet, amenorrhœa, dropsy, and all forms of rheumatism.

No spring in the district has attained a higher reputation, or proved itself more generally useful, than that known as the Priest's Bath. The variation in temperature is due to the rise and fall of the lake and the direction of the wind. When the lake is high and the wind blowing towards the baths the conditions are favourable to a high temperature, and *vice versâ*, the cold water of the lake affording a more efficient barrier to the escape of heat than the open pumice-gravel of which the shore is composed. A patient emerging from his bath looks like a boiled lobster, and I regard this determination of blood to the skin as a most important therapeutic factor: the vascular and nervous apparatus of the skin

is powerfully stimulated by it, and internal congestions are relieved. Our alkaline waters, on the other hand, which contain the chlorides and silicates of the alkalies, have a soothing and emollient effect on the skin, and are of great value in eczema, and other cutaneous ailments. The water of the Priest's Spring is brilliantly clear when undisturbed, and pale-green in colour. A faint odour of sulphuretted hydrogen pervades the neighbourhood, which gas, together with sulphurous acid, is copiously evolved. Since the eruption of Tarawera this offensive odour has been much modified, owing, probably, to an increased evolution of sulphurous-acid gas at that time. Fortunately for the nasal organs and general comfort of the bathers, these gases effect a mutual decomposition, resulting in the formation of sulphur and water, thus—$2H_2S+SO_2=3S+2H_2O$; which means that two parts of sulphuretted hydrogen, combining with one part of sulphurous acid, form three parts of sulphur and two of water. Wherever steam charged with these gases is able to penetrate, sulphur is deposited. This is the origin of all the sulphur in the district. It permeates readily the siliceous sinter rock, forming beautiful needle-like crystals of sulphur in the interspaces. Sulphur being thus constantly transformed from the gaseous to the solid state in the water of this spring, it is very possible that, coming into contact with the skin in this nascent and impalpable form, its therapeutic power may be considerably enhanced: there can be no doubt about its absorbtion, for our patients tell us that their underclothing is redolent of sulphur for weeks after returning home. The Priest's bathing-pavilion is a building 74ft. long by 44ft. wide, having a superficial area of 3,256 square feet. It is divided into male and female departments. Each department comprises two public *piscinæ*, 16ft. by 12ft., with two private baths (each 6ft. by 6ft.) for special cases, lounging-rooms, and comfortable dressing-rooms. Each bath is provided with a cold fresh-water shower, and douches either hot or tepid, thus materially enhancing the hydropathic efficiency of this remarkable water.

2. *Whangapipiro, or "Madame Rachel's Bath,"* at Rotorua.—Analysis (in grains per gallon): Chlorine of sodium, 69·43 gr.; chloride of potassium, 3·41 gr.; chloride of lithium, traces; sulphate of soda, 11·80 gr.; silicate of soda, 18·21 gr.; silicate of lime, 4·24 gr.; silicate of magnesia, 1·09 gr.; iron and alumina oxides, 2·41 gr.; silica, 5·87 gr.: total, 116·46 gr. in one gallon; also carbonic-acid gas, 3·79 gr. Temperature: Formerly 174° Fahr., but rose to 194° Fahr. after eruption in June, 1886. Special indications: Diseases of the skin, especially psoriasis. By internal administration (whereby an increase in the elimination of urea and uric acid is produced) in rheumatism, gout, and certain forms of dyspepsia.

The "Rachel" bathing-pavilion adjoins Te Pupunitanga, or 'The Priest's Bath." Here we have a water diametrically opposite in character to the last described—an alkaline siliceous water, having a temperature at its source of 180°. This source is a cauldron of enormous depth, situated some 200 yards from the bath-

ing-pavilion, and yielding 50,000 gallons daily. We have a simple system of cooling by which the water may be used at any desired temperature. Here also is a separate department for either sex, each containing a public *piscina* 16ft. square, four private baths, a lounging- or waiting-room kept at a constant temperature of 70° by hot-water pipes, and dressing-rooms. The reaction of the water is alkaline, and it contains a small amount of sulphuretted hydrogen. The delicious sense of *bien-être* produced by bathing in this water, with the soft satiny feeling it communicates to the skin, must be felt to be appreciated. It is useful in all forms of skin-disease—indeed, in eczema it may be considered a specific if continued long enough, together with a suitable regimen. I frequently recommend the internal use of this water. Its taste is not unpleasant, and its action is mildly antilithic. Waters containing silicates are said to be useful in the uric-acid diathesis, and I have certainly found it suit gouty patients admirably.

3. *Oruawhata*, a hot pool within the Sanatorium grounds, supplying the warm swimming bath, was originally a favourite Maori cooking and bathing place. Fifty years ago it was rendered *tapu* for a long period by the fact that a Maori boy, when flying his kite and running backwards, fell bodily into it and was scalded to death. However, it was used for both cooking and bathing as lately as 1880. At the time of the Tarawera eruption in 1886 it was a single irregularly-shaped pool, having two powerful springs at its northern end. These our late engineer, Mr. C. Malfroy, isolated from the surrounding water and converted into artificial intermittent geysers, thus forming not only one of the most interesting objects in the Sanatorium grounds, but a work of eminent practical utility, as we are able to convey the water from the geysers to the swimming bath at an almost boiling temperature, instead of leaving it exposed to a large cooling area, as was the case formerly. This hot basin—some 60 ft. long by 30 ft. wide—is now built round with concrete and protected by a substantial iron railing. The water is saline in character, with silicates. Analysis (in grains per gallon): Chloride of sodium, 60·44 gr.; chloride of magnesium, 1·04 gr.; sulphate of lime, 5·48 gr.; silicate of magnesia, 0·32 gr.; silicate of soda, 8·38 gr.; silicate of iron oxide, 1·42 gr.; silica, 14·20 gr.: total 91·28 gr. in one gallon. Sulphuretted hydrogen, 5·52 gr.; carbonic acid, 2·21 gr. Temperature: 140° Fahr. Special indications: Almost identical with those of the foregoing spring (Whangapipiro).

The Blue Bath is a warm swimming bath, 62 ft. long by 24 ft. wide. It is built of stone and concrete, with a smooth surface of Portland cement; has a depth of from 4 ft. 6 in. to 3 ft., and contains about 30,000 gallons of water, maintained at a temperature of 98°. This is the popular pleasure-bath of the Sanatorium, in which our rheumatic invalids are able to take exercise without undue fatigue. It was completed in 1885, and opened by Mr. George Augustus Sala. While excavating this bath the workmen struck upon a remarkable sulphur-cavern, its roof and sides thickly coated with

brilliant acicular crystals of sulphur, and at its base a hot-spring yielding steam so strongly impregnated with sulphur-gases as to be quite irrespirable. This we have conducted to the surface, and employ as a sulphur-vapour bath, diluting it as occasion requires with steam of a milder character. In sciatica, and all forms of rheumatism, this is one of our most popular and efficacious remedies.

4. *Cameron's Bath* (known as "*Laughing-gas Bath*"), within the Rotorua Sanatorium Reserve, a quarter-mile from the bath-pavilion, on the shores of Lake Rotorua, at a point called Te Kauwhanga. It is a muddy pool 30 ft. in diameter, with a constant discharge of gas (sulphuretted hydrogen, with sulphurous acid), which, when inhaled, causes faintness and great excitement of the respiratory and vascular functions. The pool has no outflow; the water is a dirty chocolate colour, hepatic, feebly saline, and has a persistent acid reaction and offensive odour. Bathing in the spring itself is to be deprecated. Analysis (in grains per gallon): Sulphate of soda, 44·54 gr.; chloride of potassium, 1·67 gr.; chloride of sodium, 12·04 gr.; chloride of calcium, 5·22 gr.; chloride of magnesium, 1·28 gr.; chloride of aluminium, 0·62 gr.; silica, 9·22 gr.; hydrochloric acid, 5·92 gr.: total, 80·51 gr. in one gallon. Sulphuretted hydrogen, 4·42 gr. Temperature: 109° Fahr. to 115° Fahr.

5. *The Painkiller Bath*, situated at Te Kauwhanga, resembles the above water (No. 4), but is a little more saline and hepatic; it is one of the most valuable sulphurous springs in the reserve. The water has a distinct acid reaction, an offensive odour, and deposits a brownish sediment on being boiled. This spring has great curative properties, and two baths with sheltered dressing-accommodation have been built in connection with it. Analysis: Chloride of sodium, 46·42 gr.; chloride of potassium, 1·71 gr.; chloride of calcium, 2·66 gr.; chloride of magnesium, 1·47 gr.; chloride of iron and aluminium, 4·22 gr.; sulphate of soda, 29·14 gr; hydrochloric acid, 6·84 gr.; silica, 18·02 gr.: total, 110·48 gr. in one gallon. Sulphuretted hydrogen, 4·84 gr. Temperature: 204° Fahr.

6. *The Coffee-pot*, also situated at Te Kauwhanga, a small mud spring, 10ft. in diameter; the water is thick, brown, and muddy, covered with an oily slime, in fact, of a most uninviting appearance; it has a persistent acid reaction and an offensive odour; hepatic and feebly saline. Analysis: Silica, 13·86 gr.; sulphate of soda, 23·71 gr.; chloride of potassium, 0·77 gr.; chloride of aluminium, 1·46 gr.; chloride of calcium, 2·04 gr.; chloride of magnesium, 1·62 gr.; chloride of iron, 1·47 gr.; hydrochloric acid, 7·66 gr.; sulphuric acid, 7·60 gr.: total, 60·19 gr. in one gallon. Sulphuretted hydrogen, 3·19 gr. Temperature: 80° to 100° Fahr. Special indications of the last three baths) Nos. 4, 5, and 6): Chronic rheumatism and gout, chronic rheumatoid arthritis, cutaneous diseases.

7. *Hinemaru* ("*Stonewall Jackson*" or "*McHugh's Bath*"), situated in the Rotorua Sanatorium Reserve. The water is of a

yellowish colour, of a saline character, with silicates; reaction, alkaline. Analysis: Chloride of sodium, 93·46 gr.; chloride of potassium, 4·69 gr.; chloride of lithium, traces; sulphate of soda, 2·76 gr.; mono-silicate of soda, 6·41 gr.; silicate of lime, 2·89 gr.; silicate of magnesia, 1·02 gr.; iron and aluminium oxides, 2·10 gr.; silica, 8·29 gr.: total, 121·62 gr. in one gallon. Temperature: From 98° Fahr to 118° Fahr. Special indications: Cutaneous diseases, rheumatism; if filtered, suitable for internal administration in atonic dyspepsia and uratic diathesis (dose, one tumbler thrice daily between meals).

The above analyses were made in 1881 and 1882, and a re-analysis was made in 1893 by the Government Analyst, who reports as follows: "These results show that some changes have taken place in the constitution of several of these waters since their analysis in 1881 and 1882—that is, prior to the volcanic eruption of Tarawera. The 'Painkiller' Spring has evidently acquired quite a new character, being an alkaline in place of an acidic water. The Hinemaru Spring (McHugh's Bath) contains a little less chloride of sodium than formerly, and more silica, while Rachel's Spring contains a little less of the alkaline sulphate. These facts are interesting, but with the exception of the total change of character of the 'Painkiller' water, nothing has been elicited to show that any of them have changed so much as to seriously affect them for the medical purposes to which they have hitherto been applied." This should reassure those who may have been led astray by a report—diligently circulated by certain interested individuals—that our springs are weaker and less efficacious than formerly. It is true that there is no spring in the district so erratic in its temperature and density as the Priest's Bath, but, fortunately, temperature and density are not its most important therapeutic factors. The analysis of 1893, as compared with that of 1881, shows that there has been a falling-off in certain of its negative ingredients, but the curative properties of the water are maintained by an actual increase in two, at least, of its more positive constituents — free hydrochloric acid, and sulphuretted hydrogen. No one has a better opportunity of judging of the physiological and curative effects of this water than I, who, for the last twelve years, have had the advantage of daily observation; and my deliberately expressed opinion is that the water of the Priest's Bath is as powerful a skin stimulant, and as valuable a curative agent, as it was twelve years ago.

Analyses of Five New Springs.

The following are analyses of five new springs which have lately been brought into notice, owing to the overcrowding of the Priest's and Rachel Baths. No doubt they will shortly be brought under the control of the Government authorities, as part of the Sanatorium Reserve, and suitable bathing accommodation built. They are as follows:—

(1.) *Matuatonga, or "Corlett's Bath."*

	Grains per Gallon.
Chloride of sodium with a little potassium ...	66·44
" calcium	6·72
" magnesium	0·31
Sulphate of lime	10·32
Carbonate of lime	0·21
Alumina	Trace
Soda silicate with a little carbonate ...	29·27
	113·27
Sulphuretted hydrogen	2·21

This water is very similar to the Rachel Spring, and calculated to fulfil similar therapeutic indications. Being situated some thirty or forty yards from the new sulphur baths, and at an elevation of about 8 ft. above them, the water of this spring may be easily led into the baths. This would give us as complete an arrangement as is at present afforded by the Priest's and Rachel Baths; and, as regards showers and douches, the necessary power will be readily obtainable from the cold water main, which is within reasonable distance.

(2.) *Toko, or "The Postmaster's Bath."*

	Grains per Gallon.
Sulphate of soda	45·09
" potash	0·41
" lime	2·45
" magnesia	0·30
" alumina	1·34
Iron oxides	0·71
Sulphuric acid (free)	17·86
Hydrochloric acid (free)	7·40
Silica	10·11
	85·67
Sulphuretted hydrogen	5·69

This is a strongly acidic water, fulfilling all the therapeutic indications of the Priest's Spring.

This spring has died out since the excavations were made for the new sulphur baths.

(3.) *Waikupapapa, or "The Saddler's Bath."*

	Grains per Gallon.
Sulphate of soda	33·18
" potash	0·26
" lime	2·44
" magnesia	0·24
" alumina	0·32
Iron oxides	Trace
Sulphuric acid (free)	4·29
Hydrochloric acid (free)	7·49
Silica	8·23
	56·45
Sulphuretted hydrogen	3·61

This is an acidic water, similar to the foregoing, but less stimulating, and consequently more suitable for delicate skins.

(4.) *Ngaruapuia, or "The Gemini Bath."*

	Grains per Gallon.
Sulphate of soda	29·80
" potash	0·64
" lime	6·87
" magnesia	0·31
" alumina	...
Iron oxides	Trace
Sulphuric acid (free)	3·11
Hydrochloric acid (free)	6·76
Silica	12·01
	59·50
Sulphuretted hydrogen	Traces.

This is a valuable acidic water, less astringent and stimulating than the foregoing, from the fact of its containing less free acid and more silica, and is, in many cases of skin disease, a most desirable intermediate water between the soothing alkaline waters and the more powerful waters of the acid type.

(5.) *Waikirihou, or "The Vaux Spring," Supplying the New Sulphur Baths.*

	Grains per Gallon.
Sulphate of soda	32·87
" potash	1·24
" lime	4·93
" magnesia	1·83
" alumina	33·22
Iron oxides	4·42
Sulphuric acid (free)	30·32
Hydrochloric acid (free)	6·14
Silica	17·61
	132·58
Sulphuretted hydrogen	3·02

This is the strongest acidic water in the district, and most valuable as a local application to rheumatic or injured joints, but, for immersion of the whole body, requiring the greatest care and caution. Its action is that of a modified mustard-plaster, producing a strong determination of blood to the surface, the redness remaining much longer than that caused by the Priest's Bath. The cause of this will be seen on comparing the amount of free acid in the two waters. It is not a water to be trifled with; and patients with weak hearts or delicate skins will do well to take advice before using it.

The latest discovery with regard to the therapeutic power of this water is, that it abolishes the craving for alcohol. If I had heard this from one or two individuals only I might have disregarded it,

but hearing it commented on almost daily, I have taken the trouble to look up the cases. Two of these were very aggravated examples of inebriety, whose acquaintance I first made in the Court-house, where I found myself under the painful necessity of fining each of them the usual 5s. and costs. They assure me that they find themselves new men since bathing in these sulphur baths, and have lost all taste and desire for liquor of every kind. Three other patients of mine, to whom I found it necessary to advise total abstinence, corroborate this testimony, stating that they have felt no craving for stimulants since using the baths. They are very enthusiastic in the matter, and think that an asylum for inebriates should be established here at once. No doubt the craving for alcohol is kept up by a congested state of the mucous membrane of the stomach, so that the *modus operandi* of these waters is not far to seek; the congestion is relieved by the powerful determination of blood to the skin. In like manner, hæmorrhoids are cured by our acid waters, from the relief afforded to a congested liver. This should be good news for the Prohibitionists, and, in the event of their floating an inebriate asylum company, I shall expect to be remembered in the distribution of promoters' shares.

The Whakarewarewa Baths.

At Whakarewarewa, two miles from Rotorua, there are two springs which have a well-merited reputation.

1. *Turikore*, or the "*Spout Bath.*"—This water is in great repute among the Maoris for the cure of cutaneous diseases, rheumatism, lumbago, sciatica, and kidney complaints. It is of a sulphurous character, and has a faintly-acid reaction, which changes to alkaline on boiling the water. Analysis: Silicate of soda, 16·32 gr.; silicate of lime, 1·61 gr.; silicate of magnesia, 1·14 gr.; silicate of iron, 0·39 gr.; sulphate of soda, 13·47 gr.; chloride of potassium, 1·24 gr.; chloride of sodium, 53·61 gr.; phosphate of alumina, traces: total, 87·78 gr. in one gallon. Temperature: 96° Fahr. to 120° Fahr. Special indications: Cutaneous diseases, lumbago, chronic rheumatism, local palsy of muscles.

2. *Koroteoteo*, or the "*Oil Bath.*"—This water is alkaline and slightly caustic. Analysis: Mono-silicate of soda, 2·08 gr.; mono-silicate of lime, 3·16 gr.; mono-silicate of magnesia, 0·76 gr.; mono-silicate of iron, 0·85 gr.; sulphate of soda, 7·49 gr.; chloride of potassium, 1·46 gr.; chloride of sodium, 66·34 gr.; chloride of lithium, traces: total, 104·54 gr. in one gallon. Temperature, 212° Fahr. Special indications: Cutaneous diseases.

Would a Medical Guide-Book to the Thermal-springs of Rotorua be of any practical Value?

This is an important question, since the general public would be almost unanimous in answering it in the affirmative, perhaps adding as a rider, "provided it contained full and explicit directions for self-treatment." The medical profession, on the other hand, would be

equally unanimous on the negative side. If we could tabulate diseases, and attach to each its appropriate remedy or remedies, the science of medicine would be simplified indeed; but, unfortunately, this cannot be done. Every case requires to be dealt with on its own merits. One of the first lessons a medical student learns is, "Treat your patient first and his disease afterwards." An old Latin adage says, "*Quot homines, tot sententiæ*"—So many men, so many minds. It would be equally true to say, "*Quot homines, tot corpora*" —So many men, so many bodies—as no two are identical physically and mentally. When a man applies to a life assurance society for an insurance on his life, such society requires the fullest information as to his family and personal antecedents, his physique, the condition of his internal organs, his occupation and habits of life, before they feel competent to judge of the risk they run in accepting his proposal. This is precisely the information a physician requires before he feels competent to form a correct diagnosis or prognosis, or to decide what plan of treatment is most likely to prove successful; and yet there are thousands of people who believe in such books as "Every man his own Doctor" and "Every man his own Lawyer," It is a matter of everyday experience to find the nervous, excitable man, who reads medical books, imagining himself the victim of every ill to which flesh is heir; and, no doubt, the man who thirsts for cheap legal knowledge finds his litigious proclivities accentuated. The legitimate practitioners of the two professions are, in the end, the persons chiefly benefited by such works.

Perhaps nothing will better emphasize the foregoing remarks or prove more generally interesting than a short sketch of the position held by rheumatism in the medical mind of to-day. A recent writer on the subject remarks: "Rheumatism is a systemic disease, of which the articular lesions are the most frequent and conspicuous manifestations, but which implicates many other structures and tissues, assuming widely different forms in different cases." This is well seen in the great differences which rheumatism presents in childhood, adolescence, and old age. Again: "'Rheumatism' and 'rheumatic' are terms very loosely applied. If they refer to one definite set of phenomena, and depend on a single morbid process, the nature of such process cannot, as yet, be spoken of with any degree of certainty. A great variety of disorders are popularly styled 'rheumatic,' which have no real connection, either with each other or with the more typical forms of the disease. The word is a convenient designation for any ache or pain which does not readily fall under any other category." The frequency with which peripheral neuritis is spoken of as muscular rheumatism is a case in point.

Of the numerous theories in explanation of the pathology of rheumatism, the following are the chief: (1.) That the heart is the starting-point, and inflammation of its lining membrane (endocarditis) the principal event on which all other lesions depend. (2.) That it is due to some disturbance of the central nervous system, caused either by surface chill, or the action of a chemical or

organized poison upon the great nerve centres. (3.) That it is caused by an excess of lactic acid which is supposed to play a part analagous to uric acid in gout. (4.) That it is an infective disease, due to the presence of certain micro-organisms in the system, or toxic matters generated by them. This theory is rapidly gaining ground, and is, perhaps, more generally accepted to-day than any other. The facts on which the assumption rests are these: that certain micro-organisms have been found in the blood and urine of patients suffering from acute articular rheumatism, and that their abundance or scarcity is determined by the stage, or degree of severity, of the attack; also, that it is the only hypothesis that will account for acute rheumatism appearing as an epidemic, as it does in some localities. "Not one of these theories," says Dr. Garrod, "can claim to be clearly established, and no one of them has met with universal acceptance. The problem of the pathology of rheumatism still remains unsolved."

Cases suitable for Treatment.

The selection of cases suitable for treatment at Rotorua is a most important matter. I am aware that there is a strong tendency, both with physician and patient, to try anything as a *dernier ressort*. It is a serious matter, however, to put a patient to the trouble and expense, and possibly pain, of making a long and weary journey, to rob him of the comforts of home and the society of his friends, without at least some reasonable hope that his labour will not be thrown away.

The two most important questions to be answered before deciding to send a case to Rotorua are: (1) Has the patient sufficient strength to bear the journey? and (2) is the case one likely to benefit by the treatment? With regard to the first question, it must be remembered that the long thirty-four miles coaching journey over a bad road is a thing of the past. The railway now gives through communication with Auckland within a little over ten hours. Still, a ten hours' railway-journey will not be accomplished by an invalid without some fatigue, and possibly increase of pain; but, if there be sufficient vitality to render such inconvenience a matter of mere temporary concern only, it is no insurmountable barrier. Nor need the partial or even total loss of the patient's locomotive power prevent his coming. We have many instances on record of patients who on arrival required the aid of crutches, or had actually to be carried to the bath, and yet went away enjoying the full use of their limbs. In considering the second question, medical men will not need to be reminded that where profound organic structural change exists very little benefit can be expected, so that considerable discrimination must be exercised in selecting cases of paralysis for treatment. Where nerve-elements are extensively destroyed hot water has no regenerating power that I am aware of. The same may be said of osteo-arthritis or chronic rheumatic arthritis, with structural change and great deformity of the joints. Such cases

may improve in general health, gain weight, and lose pain, but there the improvement ends. Our treatment is contra-indicated in phthisis as long as active destructive change is going on in the lungs. Certain chronic *poitrinaires*, however, pay us periodical visits with advantage.

Paraplegia Cured.

Primary functional paralysis, in which there is reason to believe that the nerve-centres have undergone no organic change—such paralysis, for example, as may be induced by depressing morbid influences, as malaria, influenza, sexual excesses, mental or physical fatigue, exposure to wet and cold, alcoholism, or hysteria—are likely to benefit by treatment at Rotorua.

Several cases in point are given in the New Zealand Year-book for 1893. Two illustrative cases will be sufficient to quote here.

H. C., a bushman, aged twenty-three, had become completely paraplegic, presumably from exposure to wet and cold. He had been for many months dependant on a Charitable-aid Board, which sent him to Rotorua. For three weeks he was carried to his bath, at the end of which time he was able to stand alone. At the end of five weeks he could walk with two sticks, and ride on horseback. In three months he was as well as he had ever been in his life.

The wife of a Native chief from the Napier district was brought here for treatment at the beginning of March, 1895. Two years before she was thrown from a buggy and suffered concussion of the spine, this resulted in complete paraplegia with paralysis of the sphincters. She was unable to stand; her general health was excellent, and there was very slight muscular atrophy. After six weeks' treatment—chiefly at the Whakarewarewa Springs—she was able to walk with the aid of two sticks, and fast regaining control of the bowel and bladder. I have little doubt she will make a perfect recovery.

Gout, Rheumatism, and Skin Diseases.

No more favourable field for the observation and study of these allied diseases could be wished for than that afforded by Rotorua, nor is there any place more bountifully favoured by Nature for their successful treatment. These diseases furnish fully 75 per cent. of the cases resorting to Rotorua for treatment. With regard to gout, several prominent physicians of the French school are of opinion that sulphur baths are distinctly injurious, and should be rigidly proscribed in gout. They affirm that the formation of uric acid is increased by them, and the solvent power of the blood for that acid diminished. We are aware that certain medicines have the latter effect, notably, the mineral acids, and, perhaps, strychnia and arsenic; but during an experience of twelve years we have never found that our sulphur baths have had other than a beneficial effect in the disease. Two remarkable examples of this may be interesting.

H. W., aged fifty, has been a martyr to gout for twenty years. During the past season he spent two months at Rotorua. His condition was so critical that his friends scarcely expected him to return home. He was extremely anæmic and debilitated, could not stand or even sit upright; the mind was enfeebled, his conversation inconsequent and childish; wept on the slightest emotional excitement. It was quite two weeks before he was strong enough to take the baths with safety; he then had one Priest bath daily, greatly to his advantage: his strength, appetite, and mental condition improved, he could stand and take a few faltering steps. After this he was able to take two Priest baths daily; the improvement continued, and on leaving he was able to walk with the help of a stick fairly well. The only medicine he took was salicine, with dialysed iron. Since his arrival home—now four months ago—his improved condition is maintained.

A. B., aged forty, a professor of music from South Australia, has been for some years a sufferer from gout. He has the usual deformity of finger-joints, with chalky concretions. Occasionally the immobility of the fingers has been so great that he has been unable to practise his profession. He has paid Rotorua an annual visit for some years past. A very few of our sulphur baths always set his fingers at liberty, and enabled him to continue his music-teaching. The result is that he has left South Australia and settled himself permanently in Auckland, in order to be within easy reach of Rotorua.

We cannot afford to ignore results like these in favour of any theoretical objection; so that I think we must continue to prescribe our sulphur baths in gout, the French medical dictum to the contrary notwithstanding.

In all forms of rheumatism and rheumatoid arthritis we have much success, especially where arthritic degeneration is not too pronounced. Hot acidic sulphur-baths at a temperature not exceeding 104°, or sulphur-vapour up to 115°, taken twice daily for a carefully regulated time, according to individual tolerance—which we find to vary greatly—forms our routine treatment. These waters redden the skin, and cause some tingling sensation for an hour or two. Occasionally some irritation of the skin occurs, which is readily allayed by a few warm alkaline showers or douches. In those numerous and well-known cases of chronic hip-rheumatism, often due to injury, we find nothing so efficacious as the hot douche. The beneficial result is due partly to the quality of the water, and largely to its mechanical action: fortunately, our arrangements are so complete that we are able to vary the temperature and percussive power of the douche at will. We are able to quote several cases of cure even where a considerable amount of fibrous anchylosis has existed. If the rheumatic patient progresses favourably under the bath-treatment alone, neither medicines nor electricity are employed, but if after a few weeks his progress is not satisfactory we find galvano-faradism a valuable adjunct. Usually thirty cells are

put into circuit with a faradic machine, and the double current applied in the labile manner to the parts affected for fifteen minutes daily. We find this answers better than either current alone. In cases of muscular atrophy faradism is resorted to from the commencement. Massage is also occasionally of use.

Great Success in Cases of Skin-disease.

Perhaps there is no class of diseases in which we meet with more uniform success than those affecting the skin. The solid and gaseous constituents of the waters are no doubt important; but I have more confidence in the influence of change, and all that it implies in its effect on both mind and body, combined with the prolonged maceration of the cuticle, and the constant exposure of the skin to air and light which frequent bathing entails. General eczema, which may have resisted every form of treatment for years, is generally cured in a period varying from six to thirteen weeks if the patient is willing to submit himself to rigorous medical discipline. The same may be said of psoriasis,—at least, as far as its disappearance for a longer or shorter period is concerned. It is rare indeed to see psoriasis completely eradicated. For ringworm and the impetiginous eczema of children the water of the Priest's Spring is a specific. In sycosis epilation is necessary, after which our alkaline waters complete the cure.

We have had great success during the past year in the treatment of skin diseases. Several cases of general eczema have been completely cured in the Sanatorium.

Pemphigus is one of the rarer forms of skin disease, and, in its severer manifestations, not infrequently proves fatal. It is characterised by an eruption of large vesicles—technically termed "bullæ"—which vary in size from that of a sixpence to a hen's egg. These vesicles are distended with serum, and require to be punctured and evacuated. M. J., a girl aged nineteen, came to the Rotorua Sanatorium suffering from this disease. Fortunately, it was not the graver form of the ailment, but a more benign manifestation well described by Kaposi (Hebra's successor in Vienna) as "*Pemphigus vulgaris benignus.*" The irritation was severe, and interfered greatly with her rest at night; however, she had not taken more than six baths when all irritation ceased; at the end of a week the vesicating process ceased also, and her skin was simply marked with purplish-red patches corresponding in area with the bases of the bullæ: these faded to a pale-brown and then disappeared. In three weeks she was virtually well. I kept her a fortnight longer and then sent her home, which was close to the sea. To my surprise, in less than a week, I received a letter from her father stating that the whole thing had reappeared and she was as bad as ever. We readmitted her to the Sanatorium, put her under the same treatment, and on this occasion the curative process went on even more rapidly than before. In three weeks she was again apparently well, but instead of sending her back to the sea, she was

advised to go forty miles further inland, which she did. She has now been there three months, and writes to say that she remains perfectly well.

I could quote numerous instances in which sea-air has greatly aggravated skin affections attended with violent itching, particularly in stormy weather, when the atmosphere is laden with saline particles.

In these cases we do not pin our faith exclusively to the baths, to the exclusion of all internal medication. However inoperative such treatment may have been at home, we find that, in conjunction with the new environment, rest, change of air and scene, with the baths, such treatment is of the greatest use. Patients frequently decline to take medicine, saying that they have exhausted the Pharmacopœia, and have come to Rotorua to try the baths as a last resource, but have little faith in them. Such cases are discouraging. It is difficult to engraft an improved physical state on a hopeless mental condition.

Neuralgia.

Neuralgias, as a rule, do remarkably well. Patients suffering from sciatica are a numerous class with us, most of them presenting a very chronic history. When the disease is not distinctly associated with the gouty or rheumatic diathesis, is not of long standing, and has been caused by exposure to cold, it is very quickly cured. A few baths relieve the pain, and there is rarely any stiffness or weakness remaining. Chronic cases are not so easily dealt with—they require great patience and perseverance on the part of both physician and patient. Our routine treatment consists of hot baths, sulphur-vapour, the douche, and galvanism. After six or eight weeks it often happens that nothing remains to remind the patient of his old enemy beyond some slight weakness or soreness of the limb, and I usually advise him to try a week's sea-bathing on his way home. In order to accomplish this he should arrive in Rotorua not earlier than September or later than February. We have had some good results in the treatment of cervico-brachial neuralgia. An interesting case is detailed in the Year-book of 1893.

A man about fifty years of age presented himself some time ago suffering from a spasmodic neuralgia of the facial nerve. Any movement of the jaws, as in eating, yawning, putting out the tongue, and even sometimes in speaking, brought on a paroxysm, lasting, fortunately, only a few seconds, but evidently agonizing; in fact, his life was a burden to him. After four weeks' persistent bathing, with iron and arsenic internally (which no doubt he had taken before) he left cured.

Peripheral Neuritis cured.

The subject of this is, or rather was, Dr. King of Auckland. He is very glad, no doubt, to be able to speak of his ailment in the past tense. I have his permission to publish the following letter; indeed,

he is most anxious that his case should receive the fullest publicity. The letter explains itself and needs little or no comment of mine :—

DEAR SIR,— Auckland, 5th May, 1897.

I was sorry to have missed you while at Rotorua, although, to tell you the truth, I was solely on a health-seeking mission, little expecting to receive the benefit I did, and therefore not much inclined for company. My trouble was peripheral neuritis, caused perhaps by the diphtheric poison acting on a nervous system already exhausted by over-work and worry. Without going fully into details, I may say that I began to fail in January last, and had to leave my practice on the 16th of that month, almost unable to do anything for myself. Mrs. King and I went south to Dunedin, Wakatipu, Invercargill, Christchurch, and Hanmer Springs, where, after ten days' bathing, I seemed to receive a little benefit from the use of baths at a temperature of 110° to 114°, but not less. I then returned to Auckland very little the better, after seven weeks, having to be helped in and out of the cab on Saturday, 6th March. On the following Monday I left for Rotorua, where I took chiefly hot Rachel and Postmaster baths, with a Priest bath occasionally, but this I could not get hot enough. The Postmaster I took up to 111° and could almost feel it do me good. The Rachel I took up to 118°, and I attribute my recovery mainly to that. I cannot speak in too great praise of Rotorua, and I think such a place ought to be the sanatorium of the world. Of all the baths I took, I certainly like the Postmaster best. I shall be perfectly willing at any time to bear out all I have said. I will gladly give you my assistance for a few days at any time should you be needing a change. I intend to put my case before the Medical Association, and shall endeavour to publish it in the *Medical Journal*, so that you will hear further on the matter. My last word is: I thank God, from my heart, for Rotorua.

Thanking you for this opportunity of saying a word, believe me,

Yours very faithfully,

T. W. KING.

This evidence, coming from a medical man, is of double value, since it leaves no doubt as to the correctness of the diagnosis, or the efficacy of the treatment adopted. In the interest of those who may be inclined to take baths at the high temperature described by Dr. King, I think it right to state that that gentleman did not immerse his whole body in such baths, but only the affected limbs.

CURATIVE EFFECTS OF MINERAL WATERS.

To enumerate every ailment in which our thermal springs have proved useful would prolong this paper indefinitely. Suffice it to say that in many cases their healing power has been discovered accidentally. Many women bathing for rheumatism have found themselves cured of chronic metritis and leucorrhœa, and as a result of such cures have proved fruitful after years of sterility. Congestion of the liver, biliary catarrh, with jaundice and hæmorrhoids, have been cured by the acid sulphur waters, which also prove useful as a topical application in ozæna and ulcerated throat. This class of water also tends to reduce plethora and corpulency without prostration, insures healthy action of the skin, and relieves torpor of the bowels.

ULCERATED THROAT.

The mention of ulcerated throat reminds me of two most interesting cases which presented themselves recently from the island of

New Caledonia. In this island, it appears, chronic laryngitis is common.

The first case was that of a French gentleman engaged in business, whose throat ailment was of long standing. He remained with us a few weeks, used the water of the Priest's Spring as a gargle, and as a wet compress to the throat at night, and bathed in the same water twice daily. He left perfectly cured.

The second case was a much more serious one. The patient was a French Roman Catholic priest. He attributed his ailment to excessive use of his voice in preaching, teaching, and singing. He had constant cough, his voice was hoarse and scarcely audible, and there was occasional slight hæmorrhage from the laryngeal ulcers. After pursuing for four weeks the treatment described in the foregoing case, he left very much improved, but by no means well. To my surprise, in a few weeks after his departure he wrote to our late Resident Engineer, Mr. Malfroy, stating that to his great delight he found himself perfectly cured, and that he could use his voice in preaching and singing as well as ever he did in his life.

Permanent Benefits realised.

During the past eight years my correspondence with patients proposing to come to Rotorua, and with those who have left after a longer or shorter experience of our bath treatment, has been considerable. No fact has struck me more forcibly than this: that patients who have left greatly benefited, but not cured, almost invariably write to say that, after being a short time at home, they realise the benefit they have derived, and, in most cases, they find themselves permanently cured.

It appears that, whatever it is that our patients take into their systems by absorption or inhalation, and whatever may be the influence of change of climate, scene, and occupation, of relaxation and rest, time is required for assimilation, and the true benefit is only realised some time after their return to their former surroundings.

I am glad to find that this experience is not peculiar to New Zealand, but is quite common with those who frequent the spas of Europe.

Massage.

That department of medicine which relates to the discovery and application of remedies to the cure of diseases being known as Therapeutics, it follows that we may appropriately speak of the application of thermo-mineral waters to the cure of diseases as balneo-therapeutics, of massage as masso-therapeutics, and of galvanism as galvano-therapeutics. Now, any one writing in this day on balneo-therapeutics could scarcely afford to ignore the subsidiary agencies of galvanism and massage. I say subsidiary advisedly; since both find their truest value and highest use as adjuncts to bath treatment, bathing diminishing the resist-

ance of the skin to the galvanic current, and by its emollient influence greatly assisting the manipulations of the *masseur*. We hear a good deal now-a-days about massage; there is scarcely a spa in Europe where it is not practiced. Aix les Bains appears to be its headquarters. Some of those who desire to be considered professors of the art are too apt to represent it as a panacea for all human ills, and so mislead the unwary. It is desirable, therefore, that the general public should get some definite idea of its real worth. The following is what a lecturer on therapeutics at the Westminster Hospital, and examiner in *Materia Medica* to the Royal College of Physicians of London, says about it: "By massotherapeutics I mean the scientific aspect of the subject: massage, that is, simply as a therapeutic agent, and not massage as a means of earning a living, or as a modified form of hotel-keeping. It must be admitted that many people regard massage and all that appertains to it with a good deal of suspicion, and not without reason. The difficulty is, not that massage fails to receive the credit to which it is entitled, but that it is employed in a number of cases for which it is unsuited. No discrimination is exercised, but its use is advocated for all sorts of chronic ailments. This is a grave mistake, and greatly to be deplored. The work is too often carried on by people who know little or nothing about it, and have not mastered even its most elementary details. They regard it as a special system of treatment, whereas, in reality, it is only one of a number of therapeutic agents at the disposal of every physician. They practice without knowledge, and often do incalculable harm. It is not pleasant to hear of an aneurism or an ulcer in the stomach being ruptured by the efforts of a too zealous rubber; and such mishaps are not unfrequent. The so-called *masseur* or *masseuse*, who goes about the country armed with a 'certificate,' which is simply a receipt for money paid, is an abomination, and has been the means of bringing a legitimate mode of treatment into disrepute."

For these reasons we have been shy of giving encouragement to unknown persons desirous of practising massage at Rotorua. We have long recognised the desirability of having a thoroughly competent *masseur* attached to the Sanatorium; the difficulty has been to secure the services of a man who has had the necessary training and experience. A trained operator has, however, now established himself here.

Magnitude of Resources.

There are two questions which are perpetually propounded by visitors to Rotorua. The first is usually put in this way: "How is it that the Government of New Zealand does not advertise these springs? Little or nothing is known of them in Australia, or America, or England [or wherever the questioner happens to hail from]. I should not have been here, but that I heard, quite casually, that a friend of mine had been cured here; and if I am cured I shall

be able to send you dozens of patients." My usual reply is: "We believe that good medical work will advertise itself, and your remarks confirm the assertion. It is evident you believe in your own advertising power, and so do we. It will be quite time enough to spend money in advertising when we find that our bathing-accommodation is in excess of the demand made upon it; at present it is barely equal thereto. At the same time our resources are practically unlimited. We have one spring in Ohinemutu estimated to discharge not less than a million gallons daily, which means that it is capable of supplying 10,000 baths daily of 100 gallons each. This is at present running to waste. At Whakarewarewa there is a spring almost, if not quite, its equal. Should the time ever come when these springs are not equal to the demand made upon them we have the Waiotapu Valley to fall back upon, which is surely destined in the future to be the centre of the Thermal-springs District of New Zealand. Immense as our resources are at Rotorua, they sink into insignificance when compared with those of the Waiotapu Valley."

Comparison of the Rotorua Springs with those of Europe.

The second question usually takes this form: "How do your springs compare with those of Europe?" This is a much larger and more interesting subject. The first fact that strikes the inquirer is this: that cold mineral spas, of high therapeutic value as internal remedies, are abundant in Europe, whereas they are rare in New Zealand. In the Rotorua district our mineral waters are all hot, and more suitable for bathing than for internal administration. It does not necessarily follow that because a water is hot it is unfit for internal use. The water of our Rachel Spring is an admirable dietetic-water for gouty and dyspeptic patients, used either hot or cold; and a spring has recently been discovered at the head of Lake Roto Ehu containing, in spite of its high temperature, a large amount of carbonic-acid gas, which holds in solution a good deal of carbonate of iron. After keeping a sample of this water securely bottled for about three weeks, I sent it to a chemical friend for examination. His report was as follows: "On opening the bottle of 'iron-water' from Roto Ehu I found a good deal of free carbonic-acid gas, the water effervescing briskly like ordinary soda-water; it contained what was equivalent to 172 cubic inches per gallon. Of course this estimate is not to be relied on, as it would only represent a part of the gas contained in the water direct from the spring. There is more iron than I thought would be in it. This most probably exists in the water as ferrous carbonate dissolved in the carbonic acid. It resembles the European water of Pyrmont, with this difference, that it contains more chlorine and silica. As far as I have gone I find the water to contain, in grains per gallon: Chlorine, 11·2; lime (CaO), 12·74; magnesia, 1·177; silica, 10·266; iron (FeO), 1·177—total solids per gallon, 36·560; carbonic acid, 172 cubic inches." This spring has an enormous outflow, and is

destined to be of great value in the future both for external and internal use.

The next fact that strikes the inquirer is this: that the thermal springs of the Rotorua district contain a far smaller amount of dissolved salts than those of Europe. The difference amounts to 7 to 1 in favour of Europe. If we take the mean of the total solids in grains per gallon of the nine springs first enumerated, we find that they amount to 96·51 gr. only; whereas if we take any nine European springs at haphazard—say, Vichy, Ems, Baden Baden, Marienbad, Seidlitz, Wiesbaden, Saltzbrunnen, Kreuznach, and Leuk—we find that their dissolved constituents amount to 708 gr. per gallon.

Fortunately, the therapeutic efficacy of a thermal spring is not to be measured by the quantity of fixed salts it may contain. It would be a fortunate thing, of course, if we could discover in our district a cold mineral spring like that of Hunyadi-Janos, in Hungary, of which a wineglassful is an efficient aperient; but we can scarcely expect this in a volcanic region like ours. The so-called "chemically-indifferent springs," such as Gastein and Wildbad, in Germany, contain absolutely less mineral matter than our ordinary drinking water. Thus, the New River water contains 2½ gr. of solid matter to the pint, the East London Company 3 gr., and that supplied by the Hampstead Company 4½ gr. Yet these waters cause no apparent effect, whilst the springs of Wildbad, with 3½ gr. of salt to the pint, and Gastein with 2 gr., are capable of producing therapeutic results mainly due perhaps to the temperature at which they are employed. The chemically-indifferent baths, especially the cooler ones, possess peculiarly sedative effects, not only allaying nervous irritation, but also diminishing vascular excitement, whilst the warmer springs of the same class, being more stimulant, are chiefly used in aggravated cases of chronic rheumatism and rheumatoid arthritis. One important fact has been definitely established by experiment,—whatever may be Nature's secret in the preparation of these remedies, it can never be discovered by science or imitated by art. We must be content, therefore, with the empirical knowledge that certain mineral waters produce certain effects.

There are other salient points of difference between our springs and those of Europe. Our waters contain abundance of silica and silicates, and little or no lime, while those of Europe contain abundance of lime, and little or no silica or silicates. Our district appears to be one in which silica takes the place of lime, the latter being almost a chemical curiosity.

Another curious fact is that hepatic or sulphurous waters, characterized by the presence of sulphuretted hydrogen and free sulphuric acid, as in the case of the Priest's Bath, are abundant here, but absolutely unknown in Europe. The one sole point of resemblance—common not only to Europe and New Zealand, but to all thermal springs in the world—is the prevalence of chloride of sodium (common salt) as a leading ingredient.

The Surroundings of Rotorua.

The Rotorua district enjoys the patronage of three classes of visitors: the tourist, the invalid-tourist, and the invalid proper. The question of common interest to them all is, What have they to do, and what have they to see when they get there? The best thing we can do for the tourist is to provide him with a local guide-book, and then transfer him into the hands of a guide. The most delightful trip he can take in fine weather—say from December to March—is to join a party, and do the round of the lakes.

Crossing from the old township of Ohinemutu in a steam-launch, he will first visit the Island of Mokoia, in the centre of Lake Rotorua; thence to the beautiful cold spring of Hamarana, one of the most charming picnicing spots in the district; thence through the Ohau Creek into Lake Roto-iti; here he would do well to camp for the night, and spend the following day in exploring the cosy bays and inlets with which the lake abounds, and visiting the hot spring of Manapirua, and the waterfall and hot springs in the neighbourhood of Taheke.

Crossing over to the western shore of the lake, and landing at Tapuaeharuru, a short walk of a mile or two will bring him to Lake Roto-ehu. Crossing this in a canoe, he will find the hot iron-spring already alluded to, and may readily convince himself of the presence of iron in the water by attempting to make tea with it, or using it to dilute his brandy.

Another walk of a mile will disclose one of the loveliest lakes in the district, Lake Roto-ma. The general consensus of opinion is, that this lake is a vision of beauty, which every visitor lingers round as long as possible and leaves with regret. This trip shows the visitor the Paradise of the district: he will find the Inferno at Tikitere. When George Augustus Sala visited this spot some seven years ago, he called it at once "Hell's Gates." It is certainly a most weird and awe-inspiring place. The steam rising from its boiling pools and mud-geysers is a never-failing landmark seen from every point of the Rotorua basin. The hydro-thermal action is so powerful at this spot that the visitor feels the earth vibrating under his feet; and yet, in spite of these dismal horrors, invalids—ladies even—will spend weeks here in order to get the benefit of the healing springs, which are justly credited with many most remarkable cures. Tikitere is eleven miles from Rotorua, and the trip may be comfortably made in half a day.

The next point of interest for the tourist is the Wai-o-tapu Valley, distant from Rotorua some twenty miles. Leaving his hotel after an early breakfast, say at 7 a.m., the visitor may see the chief points of interest in the valley, and return in time for dinner at 6 p.m., but only to regret the inadequacy of a one-day's visit to fully inform himself of the wonderful resources of this remarkable district.

New Road-works.

Excellent work has been done recently in the formation of new roads to the principal sights of interest. A good coach-road is now completed from Rotorua, through Tikitere, skirting the Lakes Roto-iti, Roto-ehu, to the head of Roto-ma. This is the most interesting and picturesque drive in the district. A good bridle-track has been formed to the summit of Ngongotaha Mountain, from which the finest panoramic view of the surrounding country is obtained. In the north, the Bay of Plenty may be seen with its numerous islands; to the south the snow-clad summits of the volcanic mountains in the Taupo district. A road also is well advanced from Rotorua, through the Waiotapu Valley to Wairakei, and on to Taupo, which will shorten the distance between the latter place and Rotorua by ten miles, besides being a far more interesting and attractive route.

Tarawera.

Perhaps there is no more enjoyable trip for the young and strong than the journey to Tarawera Mountain, the scene of the eruption on the 10th of June, 1886. A ride of ten miles on horseback brings the visitor to the buried village of Wairoa; thence a voyage by boat some nine miles, across Lake Tarawera, lands him at the foot of the mountain. The ascent will occupy an hour and a half, and having arrived at the summit, he cannot but feel well rewarded for his toil. No verbal description can possibly convey an adequate idea of the scene of devastation and desolation which this standpoint reveals.

The best advice we can give to the invalid tourist is to attend to business first and pleasure afterwards. If he really wishes to derive benefit from the hot springs, he must not bathe irregularly on the advice of Dick, Tom, and Harry; taking a long fatiguing journey one day, and possibly three hot baths the next, and then wondering how it is that he feels so limp and exhausted: this kind of thing will only disappoint him, and do no credit to the springs. He may very well spend the first three weeks of his visit in bathing systematically, filling up his intervals of leisure by visiting places of interest near his hotel or boarding-house—and there are many, though usually neglected because they are so easy of access.

The Rotorua Basin and its surroundings.

Not one in twenty of the visitors staying at the Lake House Hotel takes the nearest route across the Pukeroa Recreation Reserve to the Government baths; and yet from this spot a most magnificent panoramic view of the whole Rotorua basin, 80,000 acres in extent, may be obtained. Standing on the highest point, and looking towards the north, the visitor sees spread out before him the tranquil beauty of Lake Rotorua—20,000 acres of water, with the lofty

volcanic island of Mokoia in its centre. The lights and shadows on the surrounding hills, the cloud scenery reflected in the water, the white cliffs to the north and north-east gleaming in the sunlight, the steam column rising from Tikitere, the bluff of Wahanga—the most northerly point of the Tarawera Range—just peering above the intervening hills, and in the foreground the Maori village and the English Church on a promontory jutting into the lake, form a picture which would certainly delight the artist, who usually sees when he looks, if not the tourist, who too often looks without seeing. Turning to the south and south-west, I know of no prospect more lovely on a calm summer's evening at sunset. The steam columns of Whakarewarewa are thrown into relief by the dark background of hills, and through the Hemo Gorge a glimpse is caught of the deep blue Paeroa Ranges in the extreme distance. In the west is the bold bluff of Paparata, with its sky-line clothed with forest, through which the setting sun throws a flood of crimson light, making it look like a veritable bush on fire. North of west is the Ngongotaha Mountain, rising 1,600 ft. above the level of the lake, from the summit of which may be seen on a clear day the Bay of Plenty, with its numerous islands, and inland the snow-capped mountains of Ruapehu and Tongariro.

Whakarewarewa.

At Whakarewarewa, only two miles from Rotorua, the visitor will find an epitome of all that the neighbourhood contains; hotel and bathing-accommodation, geysers, hot springs, boiling pools, mud volcanoes, hot waterfalls, and siliceous terrace formation. It will interest the visitor to know that in our Thermal-springs District exist the only geysers in that British Empire on which the sun is said never to set. Geysers are found in the Yellowstone Park, in Iceland, and in Thibet. Of the latter we know very little; but geologists tell us that, of the geysers of the world, those of the States of Wyoming and Idaho are the oldest, those in New Zealand the next in age, and, strange to say, those of Iceland, with which most of us were first acquainted, the youngest.

It will be seen, therefore, that the invalid tourist has plenty to interest him close at home, without interfering in any way with a profitable use of the numerous hot springs at his disposal.

Accommodation.

The opening of the Auckland–Rotorua Railway, which took place in December 1894, found Rotorua totally unprepared for the greatly increased traffic. From December until the end of March the hotels and boarding-houses were filled to overflowing, and visitors had to be lodged in tents. A list of the hotels and boarding-houses now open, with the number they are able to accommodate respectively, may be interesting.

Hotels.	
The Grand ..	70
The Geyser ..	50
The Palace ..	40
Lake House ..	60
Boarding-Houses.	
Bathgate House	60
The Langham	20
Tarawera House	20
Lake View ..	20
Mokoia View..	20
Mrs. Morrison's	22
Total	382

The tariffs vary from 25s. weekly. It is difficult to get an accurate estimate of the number of visitors for the past year. The hotel returns are very unreliable, as visitors move from one house to another, and so get counted twice over in many cases; but the fact remains that the amount of our bath fees for December, January, February, and March last was very much greater than for the corresponding months of any previous season, showing that our invalids at least have increased accordingly. The returns of baths taken show 28,906 for the year ended 31st March, 1896, against 23,196 for the year ended March, 1895, and 17,032 for 1894.

Routes from Australian Colonies.

The most direct route for visitors from the Australian Colonies is from Sydney to Auckland, and thence by rail to Rotorua. Those who may desire to see something more of the country may take steamer from Melbourne to the Bluff, and from thence on to Wellington, continuing the journey overland to Rotorua—a four days' trip, most enjoyable in fine weather. Patients should be recommended to bring plain, warm clothing, and substantial boots and shoes. Rotorua is essentially a convenient place for the wearing-out of old clothes. Frills and furbelows, jewellery and valuable watches, had better be left at home, as they are not improved by the sulphurous vapours arising from the springs. The watch *par excellence* for Rotorua is the nickel-plated "Waterbury."

A SCENIC WONDERLAND.

By Malcolm Ross.

The traveller desirous of seeing New Zealand scenery in all its varied grandeur and loveliness will, at no distant date, be able to commence his tour at the West Coast Sounds, work his way overland *viâ* McKinnon's Pass to Lakes Te Anau and Manapouri, proceed

thence to Wakatipu and Wanaka, then on to Mount Cook and over one of the glacier passes to the West Coast, returning eastward *vid* the Otira Gorge to Christchurch. A tour on these lines will, with the formation of good roads and tracks in some of the roughest parts, be easy of accomplishment, and embrace the principal scenic features of interest in the Middle Island. At present such a journey is impracticable, except in the case of mountaineers, or, at all events, good walkers; but the points mentioned may be all reached in different ways in comparative comfort.

West Coast Sounds.

Beginning in the South, we have the far-famed West Coast Sounds, no fewer than thirteen in number, all lying within a distance of 120 miles on the south-west coast of the Middle Island of New Zealand. The best way of visiting the Sounds is by the annual excursions, so well carried out each summer by the Union Steamship Company of New Zealand. Every season these excursions, which partake of the nature of a gigantic ten-day water-picnic, are patronised by hundreds of sight-seers from all parts of the civilized globe, and it is safe to say that no finer excursion can be enjoyed in any other part of the world. The steamer calls first at Preservation Inlet, thereafter proceeding northward through some of the most beautiful fiords to Milford Sound, the grandest of all. The mountains by which Milford Sound is surrounded are the highest on this coast, the glacier-crowned Pembroke Peak rising almost it might be said from the water's edge to a height of 6,700 ft. One of the most noticeable among them is the remarkably-shaped Mitre Peak, the end of a long ridge that runs back from the Sound, and attains in the Mitre its greatest height of 5,560 ft. The Lion, a massive mountain on the opposite side, from some points of view closely resembling a lion *couchant*, is likewise a striking feature of the Sound; and the Stirling Falls (500 ft. high) and the Bowen Falls (540 ft.) are sights worth coming a long way to see. The walls of the Fiord go straight down to tremendous depths, and, except at the head, it is difficult to find an anchorage for ships. In one place, near the Stirling Fall, the soundings show a depth of 214 fathoms. The Rev. W. S. Green, a member of the English Alpine Club who visited New Zealand some years ago, thus refers to his entry into Milford Sound:—

> Vertical cliffs rose for thousands of feet on either hand, and we drove in before a blast so strong as almost to make steaming unnecessary. The surface of the sea would now and then be torn off in sheets, driven along in spindrift, and again all would be calm as glass. Waterfalls, resembling the Staubach, came down the cliffs from far above the clouds, and were blown away into spray while in mid-air by the fury of the storm. Wherever vegetation could get a footing on these immense precipices lovely tree-ferns and darker shrubs grew in profusion, all dripping with moisture, and running up the cliffs in long strips of verdure till lost to our view aloft in the torn white mists. The vivid green of the foliage was the feature of all this wondrous scene which struck me most. Two or three miles up the Sound we steamed close to an immense waterfall which, in one plunge of

300 ft., leaped into the Sound with a roar like thunder, drowning our voices and sending great gushes of spray over the steamer's deck. The face of another great cliff was so draped with numberless small falls that it seemed to be covered with a veil of silver gauze about 300 yards in width. While passing along here we fired a gun: echo after echo resounded from cliff to cliff, and from invisible crags high over our heads the echo again returned as a voice from the clouds. The mist now showed an inclination to clear off, the rain ceased, and as we entered the inner basin of the Sound the forest increased in beauty. The totara pines, draped with festoons of grey lichen, contrasted well with the soft green of the great fern-fronds, and formed a suitable background to the scarlet blossoms of the rata (*Metrosideros lucida*) which here and there lit up the upper surface of the forest with patches of intense colour. Gleams of sunshine began to dart through the clouds, giving a momentary flash on one of the numerous cascades, and then, passing over forest and cliff, added new beauties of light and shade. When about eight miles from the open sea a booming sound rose higher over the voices of the numerous cascades, growing louder as we advanced, and, rounding a forest-clad point, we came upon the grandest of New Zealand waterfalls—the great Bowen Fall. Its first fall is only about 50 ft. into a rocky basin, but, leaping from it upwards and outwards in a most wonderful curve, it plunges down with a deafening roar in a single leap of 300 ft. The "Te Anau" was allowed to drift up in the eddy caused by the fall, and, being caught by the stream in the midst of drenching clouds of spray, she was spun round as though she were a mere floating twig; then, steaming to a short distance, she stopped again. The weather had now taken up sufficiently for us to see through an opening in the clouds, the snow-clad top of Mitre Peak, which rises in one grand precipice of 5,560 ft. from the surface of the Sound. The glacier on Pembroke Peak showed for a few minutes, and then was lost to view; but what we saw formed the grandest combination of scenery upon which my eyes had ever rested. As these Sounds are from 200 to 300 fathoms deep, there are but few places in them where a ship could anchor; had we stayed there for the night we should have made the steamer fast to the trees.

The Sutherland Waterfall.

But the attractions of this locality are not exhausted by a visit to the Sound itself. There are other wonders near at hand, and now easily accessible to the tourist. A favourite excursion is the one to the Sutherland Falls, distant from the Sound some thirteen or fourteen miles. Two short stages of the journey are made in boats, but the visitor has to walk the greater part of the distance. Formerly this was rather a serious undertaking for all but accomplished pedestrians, as the original bush track was a very rough one; but a well-graded footpath has been formed all the way to the Falls, and any one capable of walking eight or ten miles on an ordinary road may safely undertake the journey. The accommodation at the end of the day's tramp is, however, of rather a primitive character, and visitors must be content to "rough it," at all events for one night. The Fall itself—1,905 ft. high—is more remarkable for grandeur than for beauty, but, in any case, it is well worth a visit, apart altogether from the splendid views of mountain, river, lake, and forest to be seen on every hand during the entire journey.

The Cleddau and Mount Tutoko.

No visitor to Milford should return without taking a stroll for a few miles up the north-west branch of the Cleddau River. The

Milford Sound.

writer has made an expedition into the hitherto unknown country at the head of the north-west branch of this river, and with Mr. W. J. Hodgkins and Mr. Kenneth Ross, ascended Mount Tutoko—the highest mountain in the fiord country—discovering several new glaciers, peaks, and waterfalls. When a track is made and a hut erected at the foot of the Age Glacier, this trip will be an easy one, and very popular with tourists to the Sounds, as an easy day's walk from Milford will take the traveller on to the clear ice of the glacier, which comes down almost to the bush in the valley, only about 1,200 ft. above sea-level. The scenery at the head of the valley, which is hemmed in by precipitous glacier-crowned mountains, is very fine, rivalling anything that can be seen in the Arthur Valley or in the neighbourhood of the Sutherland Falls. Indeed, the great majority of tourists will, as soon as facilities are provided, prefer to make this trip rather than the one to the Sutherland Falls. The terminal face of the glacier is only about ten miles from the Sound. We reached it easily in a short winter's day, though we had to carry heavy swags through the trackless forest, and over the great slippery boulders of the river, which for several miles is a roaring torrent, its banks lined with beautiful bush where the kiwi and kakapo and other strange birds find a congenial home. We pitched our tent on the ancient tree-grown moraine of the Age Glacier, and next morning started early on our climb. A certain but somewhat difficult and dangerous route to the summit presented itself up the main ice-stream, but this was abandoned in favour of the safer but more problematical one to the right of the glacier. After ascending some 3,000 ft. above the camp we were surprised to see, right above us, a magnificent ice-fall which came from a plateau beyond. Getting above this, an easy way over gentle snow slopes, cleft by great *bergschrunds*, led to the final peak, which we now expected to reach in an hour. Our expectations, however, were not realised, for the upper slopes were very hard, and a great deal of step-cutting was required, while the rocks on the final peak were glazed with ice. The rope and the ice-axes were here in continual use for four hours, and the greatest caution had to be observed. It was not till sunset that the crest of the final peak was reached. The view, as the sun sank in a bank of cloud to the westward, and as, almost simultaneously, the moon rose behind Tutoko, was one never to be forgotten. The aneroid showed the mountain to be over 9,000 ft. high. The descent was of a rather thrilling nature, as owing to the shortness of the daylight, we had to spend the night out on the mountain, some 2,000 ft. above our camp. The climb is an easy one till the final ice-slope and the last rocks are reached. It is possible, however, that in the summer, when the upper rocks are not glazed with ice, the final part of the ascent may also be comparatively easy, so that the climb may become a popular one with tourists. In any case, the ice-fall may be safely reached by any one who is a fairly good walker.

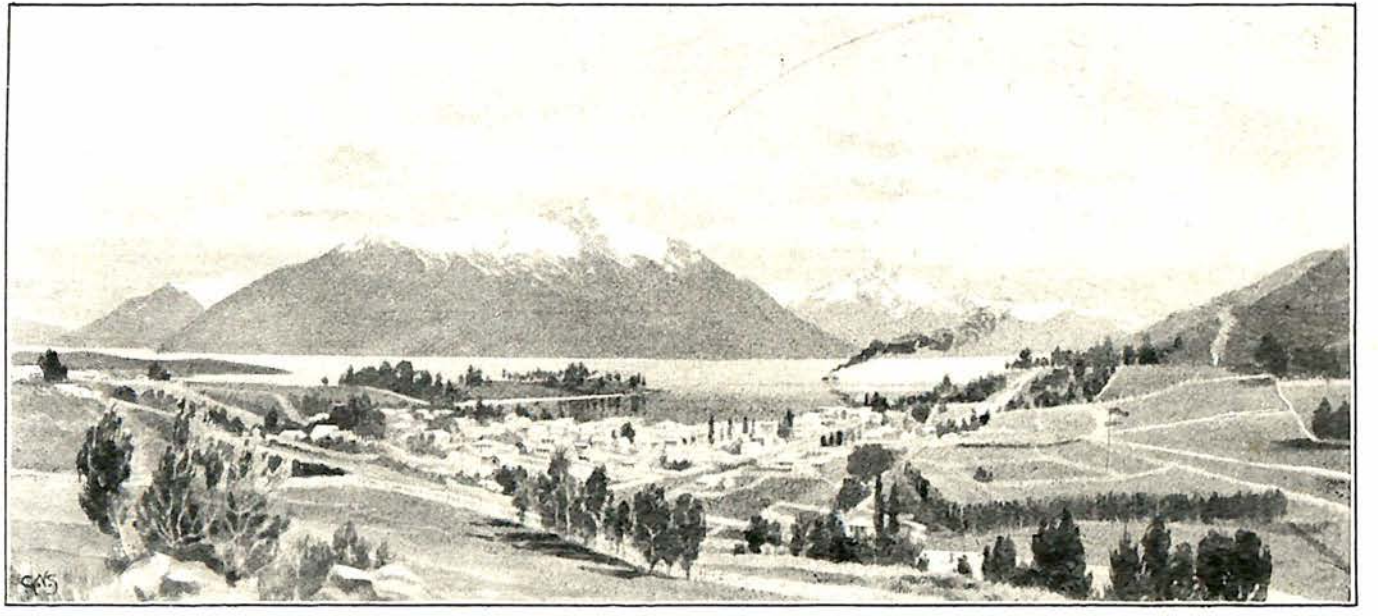
Overland to Te Anau.

This is a trip which may now be safely undertaken by any one who can walk ten or fifteen miles on an ordinary hilly road, as there are huts at convenient halting-places all along the route. The pass between the Arthur and Clinton Valleys is some 3,400 ft. above sea-level; but there is a fairly good path cut through the bush on either side, and ladies have gone from the Beech Huts on the Milford side to the Mintaro Hut on the other side in three hours. The best plan is to make the journey in easy stages, camping the first night out at the Beech Huts, near the Sutherland Falls, the second night in the hut at Lake Mintaro, at the foot of the pass on the other side, the third night in the half-way hut in the Clinton Valley, and the fourth night in the hut at the head of Lake Te Anau. The views all along the route are superb, and the scenery as viewed from the pass, with Mounts Balloon and Hart on either hand, and Mount Elliott and the pretty little Jervois Glacier opposite on the Milford side, is grand in the extreme. Those unused to bush work should secure the services of a guide, and arrange for Mr. Snodgrass's steamer to meet them on arrival at the head of the lake.

The Lakes District.

Next in importance to the West Coast Sounds, but more easily accessible to the tourist, are the lakes of Otago, each having a character of its own. To get to Lakes Te Anau and Manapouri the tourist goes by rail from Invercargill or Dunedin to Lumsden, the next day proceeding by coach to the southern end of Te Anau. Here the scenery is somewhat uninteresting and greatly inferior to what opens out when, the following day, the traveller takes the steam launch to the head of the lake. Te Anau, thirty-eight miles long and one to six miles wide, covers a total area of 132 square miles. It has three western arms or fiords, and numberless islands are scattered over its surface. On either side rise wooded mountains, and in rainy weather countless waterfalls descend into the lake. As one penetrates farther the beauties increase, and at the head of the lake the towering summits, often snow-capped, are most awe-inspiring. Traces of Maori occupation are plentiful at both Lakes Manapouri and Te Anau, and the remains of a kaik are still shown about a mile from the south end of the latter lake. The country around these lakes was once inhabited by a tribe which was exterminated by the northern Maoris. At the head of Lake Te Anau is a hut for tourists, and from thence a track runs up the Clinton Valley, over McKinnon's Saddle, and on to Milford Sound.

Lake Manapouri is reached after thirteen miles' driving along the course of the Waiau, one point of the road—the Horse-shoe Bend—being very beautiful. The area of the Lake is fifty square miles. The mountains around it from 6,000 ft. to 7,000 ft. high, and the islands in it are richly mantled with luxuriant growth. Above the bush line, as in Lake Te Anau, rise the granite tops of the



Queenstown, Lake Wakatipu.

peaks, shattered and splintered, and often snow-clad. The two largest islands are named respectively Rona and Pomona. The scenery at the head of the lake, up the Spey River and the Mica Burn, is wonderfully fine, though as yet it is not accessible to the ordinary tourist.

Returning to Lumsden, the traveller can proceed on to Wakatipu, taking train for Kingston, which is reached in the afternoon, and steamer up the Lake to Queenstown. As he nears Queenstown, which is charmingly situated, the mountains become more impressive, and the curious Remarkables, with their double cone, rise towards his right. On the left is Ben Lomond—a favourite excursion. From its summit a magnificent view of mountains and lakes can be obtained. Another trip is to Arrowtown, which lies in an important mining district. Coming back to the Shotover Gorge, the traveller passes through wild and impressive scenery, and many features of interest are here to be noted that recall the early gold-mining days. The road to the Phœnix Mine, at Skipper's, is in many parts hewn out of the solid rock, a precipice above and below. This excursion can be made in a day on horseback from Eichardt's Hotel. The Kawarau Falls, the only outlet of Lake Wakatipu, should also be visited.

Of course, the principal excursion from Queenstown is to the head of the lake. The tourist will find comfortable quarters and a good guide at Birley's, and many interesting journeys may be undertaken. Some of the finest scenery is up the Routeburn Valley to the Lake Harris Saddle, from which a wonderfully grand and comprehensive view is obtainable. Kinloch, Precipice Creek, Diamond Lake, &c., can also be visited from Glenorchy, but *the* expedition to accomplish is the ascent of Mount Earnslaw, which is practicable, in fine weather, by any one who is a good walker and can climb a little. The view from the summit is probably the finest obtainable in Otago. The bottom of Lake Wakatipu is, according to "Murray's Guide," in some places 1,100 ft. below sea-level, although the surface of the lake is 1,000 ft. above the sea. Large and excellent trout are found in its waters, which are intensely clear, and very pure. Its area is 112 square miles, its length fifty miles, and its breadth varies from one mile to three and a half miles.

Wanaka is said to excel Wakatipu in beauty, but is smaller, being thirty miles long by three miles wide, with an area of 57,000 acres. By means of a steamer that plies on the lake, various excursions may be made—up to the head, to Manuka or Pigeon Island, curious for containing a small lake in its centre, and to East and West Wanaka, from which a fine view of Mount Aspiring can be gained. From Pembroke the tourist may drive to Lake Hawea. Here, on the surrounding ranges, numbers of red deer, introduced from Scotland by the Acclimatisation Society, are doing well. The shooting season is April and May. The foot of Mount Aspiring can be reached in a day's ride, the route lying up the Matukituki Valley.

The Southern Alps.

The Southern Alps of New Zealand, extending in one almost unbroken chain along the western side of the Middle Island, though not so high as the Swiss and Italian Alps, according to competent authorities, rival them in the wonderful variety and grandeur of their surroundings. In the south the ranges, which run in different directions, are intersected by the West Coast Sounds on the one side and the fiords of the great lakes on the other. The mountains here come in many cases sheer down to the water's edge, with a most luxuriant forest growth in the valleys and on their lower slopes, and tops crowned with perpetual snow and ice; the grandeur of the scenery can scarcely be imagined. Among these ranges there are innumerable peaks, glaciers, and waterfalls, and, to the climber, the mountains in the neighbourhood of Milford Sound offer some splendid rock-work. The Mitre is a bold rock mountain of 5,560 ft., rising precipitously from the water's edge, and it seems a moot point whether its final peak is possible of ascent. On the other side of the Sound, Mount Pembroke, capped with a fine glacier, also offers a good climb, while Tutoko, as I have already stated, bears the palm from an alpine climber's point of view. Next in order comes Mount Fosbery, a remarkable rock mountain, clothed in places with glacier and ice-fall, and, from the Milford side at all events, very difficult of ascent. Mount Balloon, too, is a peak almost startling in its majesty, with its 5,000 ft. or 6,000 ft. of precipices rising sheer from the Arthur Valley. But there are mountains by the score, nay, by the hundred, in this region.

Going farther north, we have another series of fine mountains at the head of Lake Wakatipu—Cosmos Peaks, Mount Earnslaw, Mount Tyndall, Mount Edward, Mount Anstead, and other glacier peaks, all over 8,000 ft. high; and when it is remembered that, owing to the lower height of the snow-line and the lesser elevation at which the mountains begin to rise, a peak of 8,000 ft. in New Zealand is equal to one of from 11,000 ft. to 12,000 ft. in the European Alps, it will be seen that there is, even amongst our second- and third-rate peaks, a splendid field for alpine work. Mount Earnslaw, 9,165 ft. high—a massive mountain, with glaciers on all sides—is the predominating feature of Lake Wakatipu, and its ascent, first accomplished by the guide Harry Birley, is becoming a favourite one for tourists. Since Birley, and, subsequently, the writer and his brother, made the ascent, an easier route, quite practicable for the gentler sex, has been discovered, and many ascents have been made. The western or higher peak, however, is still unclimbed. Proceeding still farther north, we find the mountains increasing in height. Mount Aspiring, at Lake Wanaka, culminates in a fine peak, all but 10,000 ft. high, which rises majestically from a great glacier basin. Then come Castor and Pollux, and beyond them a long chain of alps, stretching away to where Mount Cook or Aorangi towers majestic, his snowy triple peaks 12,349 ft. in air. At Mount

Cook we are in the midst of the grandest scenes of the Southern Alps. Formerly it was somewhat of an undertaking to visit this locality; now, two days' coaching from the railway at Fairlie lands the traveller at the Hermitage, a comfortable hostelry at the very foot of Mount Cook. We look out from the drawing-room window on to the ice-seamed sides of Mount Sefton—a glorious peak draped in white glaciers—and we can see and hear the avalanches thundering down. Past Mount Sefton, and not five minutes' walk from the Hermitage, flows the Mueller Glacier, flanked on either side for eight miles by towering glacier-clad ranges, the scenery at its head being remarkably fine. Up another valley, under the great buttresses of Mount Cook, runs the Hooker Glacier, some twelve miles long, curving round to Mount Stokes (10,090 ft.), and receiving a number of fine tributary streams of ice from the western slopes of Aorangi—notably the Empress, Noeline, and Mona Glaciers. The ice from the Empress Glacier and the upper portion of the Hooker is very much broken up by pressure while rounding the rocky buttresses just above the Noeline Glacier, and forms a beautiful ice-wall, but one that is, late in the season, very difficult to traverse.

One of the finest views in the district is obtainable from the Sealy Range, at an altitude of about 8,000 ft. I made this excursion in 1890 with Mr. T. C. Fyfe, of Mount Cook fame, and we were charmed with the view. Immediately below us the Metelille Glacier curved gently down for some distance, and then poured its ice in one great mass into the Mueller, which, broken and crevassed, flowed northward in a gentle curve 5,000 ft. below us. From the source o the Mueller the eye swept round the peaks and glaciers of the Moorhouse Range to Mount Sefton, rearing his ice-seamed sides 10,000 ft. in air. Then the fine peak of Mount Stokes, far away at the head of the Hooker Glacier, and the glistening snows of St. David's Dome, came into view, while down from their bases flowed the Hooker Glacier itself, swollen with the tributary ice-streams from the long southern *arete* of Mount Cook. Over the great rocky ridge of Mount Cook, on the Tasman side, appeared the bold form of Mount Haidinger, with his fine glaciers robed in shadow, save for a little patch of gleaming white on the western slope. Then came Mount De la Bêche, with the white cones of the Minaret Peaks high above all the glaciers. Still further afield was the beautiful Elie de Beaumont, flanking the north-western side of the Tasman Valley, and just beyond it the Lendenfeld Saddle and the white mass of the Hochstetter Dom terminating the valley. From the latter came the great *mer de glace* of the Tasman, plainly visible for eighteen miles, down past Elie de Beaumont, curving round between De la Bêche and Malte Brun with a majestic sweep, then flowing in a straighter line past Mounts Haidinger and Haast, receiving tribute from glacier after glacier till it stopped far down the valley, melting slowly, and issuing forth in another form—the Tasman River. Flanking it to the eastward was the Malte Brun Range, steep and rocky; and beyond that, in the hollow between that and the Liebig Range, lay

in dim shadow the Murchison Glacier. What a glorious panorama of mountain scenery it was! Numbers of peaks, from 8,000 ft. to 12,000 ft. high, and between forty and fifty glaciers, were in sight at one time; while right in the midst of it all rose the dark buttresses of Aorangi, pile on pile, the final snow peak, 12,349 ft. high, gleaming in the setting sun.

Many fine glaciers and peaks in the Southern Alps are as yet even unnamed, and, as Mr. Green has put it, there is, in the neighbourhood of Mount Cook alone, work for a whole generation of climbers. Future mountaineers will not have to contend against many of the difficulties which the pioneers have encountered, for the Government is now awakening to the fact that the scenery is one of the best assets which the colony possesses, and is spending thousands of pounds in forming roads and tracks, so that the chief points of interest will be easily accessible to tourists, who are coming in increasing numbers every year from all parts of the world. With the facilities that at present exist for travel, it is a wonder that more of the English alpine climbers do not come out to New Zealand. There is certainly here a splendid field of virgin peaks which the best among them need not deem unworthy of his prowess.

The fauna and flora, too, of the New Zealand Alps are extremely interesting. The kea, a mountain parrot with a surprisingly powerful beak, of which, curiously, the upper mandible is jointed, has his home in these fastnesses. He is much dreaded by the runholder because of his liking for the kidney fat of the sheep, to obtain which he settles on the back of the unfortunate animal and tears away wool and flesh till the desired dainty is reached. The weka—one of the New Zealand wingless birds—is quaintly interesting, if only for the intense curiosity it evinces in the doings of the "featherless biped." In more southern latitudes are found other strange birds, such as the kakapo and the kiwi. There are many other birds likewise to be met with, interesting alike to the naturalist and the sportsman.

At Mount Cook the flora is particularly beautiful and interesting. In the sub-alpine glens numerous berry-bearing plants abound, while in favourable spots the alpine vegetation is varied and luxuriant. There are several kinds of ranunculas, and a bewildering variety of celmesias, gentians, and senecios also flourish. Among the rocks, at higher altitudes, the eidelweiss, differing but slightly from the Swiss variety, grows in profusion.

Equipment.

The visitor to New Zealand who is desirous of going beyond the verge of civilisation is often puzzled as to what he should take with him in the way of equipment, so a few hints may not be out of place here.

For the Sounds trip, fairly strong and easily-fitting boots are a *sine quâ non* if the tourist intends to visit the Sutherland Falls, the Cleddau Valley, &c. Long thin gloves and an ample veil are also

necessary in the summer time to ward off the attacks of the myriads of sandflies, which under some circumstances make life in the Sounds almost unbearable.

Referring generally to the question of outfit for travelling amongst the mountains, let us consider first the question of clothes. These should be made entirely of wool. A tweed knickerbocker suit with Norfolk jacket, flannel shirt, and fairly thick stockings will be found most serviceable. The lining of the pockets should be also of wool. A Norfolk jacket without the pleats is preferable to the ordinary kind. It should be well supplied with pockets made with flaps to button, one or two being lined inside with mackintosh. Boots should be fairly strong in the uppers, and have stout projecting soles nailed with clinkers at the edges and hobs in the middle. It is difficult to get the proper nails for alpine work in New Zealand, though nails that answer the purpose fairly well are obtainable in Christchurch and Timaru. Enough nails for one pair of boots and some to spare can be got from Switzerland by sending a post-office order for 6s. to Ulrich Almer, Guide, of Grindelwald. An ice-axe, alpine-rope, sleeping-bag, smoke-tinted goggles, knitted anklets or gaiters to keep the snow out of the boots, and woollen gloves, are also necessary if any real alpine work is contemplated. A Whymper tent, *i.e.*, one with a waterproof floor sewn into it, will be necessary for the more arduous expeditions. On the overland track to Milford Sound a tent need not be taken, as there are huts along the track; but blankets and provisions will have to be carried. A pair of rubber-soled gymnastic shoes are a great comfort in camp after a day's march. In Dr. Claude Wilson's excellent little book on mountaineering will be found a packing-list, which will serve to remind travellers of what it is necessary to provide themselves with. Much valuable information will also be found in the Badminton Library volume on "Mountaineering," by Dr. Clinton Dent and others. It will be well for the tourist, however, to remember that in New Zealand there is often difficulty in securing porters, and in thinking of his own back he will no doubt see his way to do without many of the items enumerated by these writers.

The following are some of the principal books and pamphlets dealing with the sounds, lakes, and alps of New Zealand. Many of the works mentioned are out of print, but nearly all can be seen in the public libraries of the colony :—

NEW ZEALAND ALPINE LITERATURE.

HAAST, Sir Julius von.—"Geology of Canterbury and Westland"; *Times* Office, Christchurch, 1879. Contains geological maps, coloured and plain, and illustrations from photographs by E. P. Sealy; both printed at Vienna.

HAAST, Sir Julius von.—"Head Waters of the Rakaia"; *Press* Office, Christchurch, 1886. Contains twenty illustrations.

HAAST, Sir Julius von.—"Notes on the Mountains and Glaciers of the Canterbury Province"; *Journal of the Royal Geographical Society*, xxxiv., 87, 1864.

HAAST, Sir Julius von.—"On the Physical Geography of New Zealand, principally in reference to the Southern Alps"; *Proceedings of the Royal Society of Melbourne*, 1861.

HECTOR, Sir James.—"Geological Expedition to the West Coast of Otago"; *Otago Provincial Government Gazette*, 5th November, 1863. With sketch-map.

HECTOR, Sir James.—"Handbook of New Zealand"; Lyon and Blair, Wellington, 1879. With maps and plates.

HOCHSTETTER, F. von.—"New Zealand: its Physical Geography, Geology, and Natural History"; English edition, published by Williams and Norgate in 1868. Maps and illustrations.

HOCHSTETTER, F. von.—"Der Franz-Josef-Gletscher," Ausland, 1867; *Mittheil. der Georgr. Ges. zu Wien*, x., 57, 1866-67.

LENDENFELDT, R. von.—"Ascent of Hochstetter Dom"; *Canterbury Times*, 14th April, 1883; *Australasian*, 5th May, 1883.

LENDENFELDT, R. von.—"Der Tasman-Gletscher und seine Umrandung," Ergänzungsheft No. 75; zu *Petermann's Mittheilungen*, Gotha; Justus Perthes, 1884. Contains illustrations and a very fine map.

THOMSON, J. T.—"Survey of the Southern Districts of Otago"; *Journal of the Royal Geographical Society*, xxviii., 298.

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BRUNNER, T.—"Explorations in the Middle Island of New Zealand"; *Journal of the Royal Geographical Society*, xx., 344, 1851.

BLAIR, W. N.—"The Cold Lakes of New Zealand"; *Scottish Geographical Magazine*, vol. iii., No. 11, 1867.

TOULA, Franz.—"Über die Südlichen von Neu-Seeland"; *D. Rundschau f. Geographie*, ii., 245 (1880).

GREEN, Rev. W. S., A.C.—"The High Alps of New Zealand"; Macmillan and Co., 1883. Contains an account of Ascent of Mount Cook.

GREEN, Rev. W. S, A.C.—"Fels- u. Gletscherspuren am Mount Cook in Neu-Seeland"; *Peterm. Mitt.*, 1883, p. 53.

HINGSTON, J.—"The New Zealand Sounds"; *Victorian Review*, viii., 622-38, September, 1883. Also pamphlet, "Seeing the Sounds," obtainable from the Union Steamship Co., Dunedin.

HUTTON, F. W.—"Sketch of the Geology of New Zealand"; abstract, in *Nature*, xxxi., 305, 1885.

HUTTON, F. W.—"Report on the Tarawera Volcanic District"; Government Printer, Wellington, 1887.

GEIKIE, Sir Archibald.—"Tarawera Eruption"; *Nature*, xxxiv., 320-22; *Contemporary Review*, October, 1886, pp. 481-92.

SMITH, S. Percy.—"The Eruption of Tarawera"; Government Printer, Wellington, 1886.

MANNERING, G. E.—"With Axe and Rope in the New Zealand Alps"; Longmans, Green, and Co., 1891. Illustrated.

MCHUTCHESON, W.—"Camp-life in Fiordland: A Tale of the Sutherland Falls"; Government Printer, Wellington, 1892. With map and illustrations.

ROSS, Malcolm.—"Guide to the Lakes of Central Otago"; Government Printer, Wellington, 1889. Map and illustrations.

ROSS, Malcolm.—"Aorangi: or, The Heart of the Southern Alps, New Zealand;" Government Printer, Wellington, 1892. With maps and illustrations.

ROSS, Malcolm.—"The West Coast Sounds of New Zealand: An Account of a Trip in the Union Company's s.s. 'Tarawera'"; J. Wilkie and Co., Dunedin, 1893. Numerous illustrations.

"Maoriland: An Illustrated Handbook of New Zealand"; published by the Union Steamship Company of New Zealand, 1884. Articles by Rev. R. Waddell, M.A.; A. Wilson, M.A.; and T. W. Whitson. Maps and illustrations.

"Report of the Survey Department of New Zealand"; Government Printer, Wellington. Recent numbers contain interesting articles by T. Mackenzie, M.H.R., T. N. Brodrick, E. P. Harper, and others, regarding mountain exploration.

"New Zealand Alpine Journal"—Nos. 1 to 7; Whitcombe and Tombs, Christchurch. Various articles by members of the New Zealand Alpine Club.

PART IV.—DESCRIPTION OF LAND DISTRICTS.

THE AUCKLAND LAND DISTRICT.

By G. Mueller, Chief Surveyor.

Introductory.

The Auckland Land District covers about four and a half degrees of latitude, extending from 34° 30′ to 39° S., its greatest length being about 365 miles, from the North Cape to the 39th parallel, south of Lake Taupo, while its greatest width is about 180 miles. In the peninsula north of Auckland, indented as it is on either side by harbours and arms of the sea, and with a mean width between the Pacific Ocean and Tasman Sea of little over forty miles, the range of temperature is remarkably small. The thermometer seldom registers above 80° in the shade in the middle of summer, whilst the heat is always tempered by a cool breeze, bringing the mean summer temperature to under 70° in the shade. The frosts are hardly worth mentioning, as the minimum register is seldom below 40°; but south of Auckland sharp white frosts occur very often, more especially beyond 38° of latitude, and snow lies upon the summits of some of the highest hills or mountains in winter.

Physical Features.

This land district may be said to have no real mountains, as the most prominent peaks of the several scattered ranges or hills seldom exceed 3,000 ft. in height above the sea-level, an altitude just enough—south of 38°—to clothe the last 1,000 ft. with snow in the depth of winter. North of Hokianga and the Bay of Islands there is one well-defined range of hills rising to a height of 2,463 ft.; whilst south of these places, and extending to the Wairoa River on one side and the Whangarei Harbour upon the other, the country is all more or less broken into ranges from 1,000 ft. to 2,000 ft. in height, with valleys between. The next really well developed main range lies within the Coromandel and Thames Peninsula. With a length of over 150 miles, it has an average height of over 2,800 ft., commencing with Moehau, or Cape Colville, 2,800 ft.; next, Te Aroha, a peak of 3,176 ft.; and ending at Weraiti with a height of 2,527 ft. There are two other well-defined ranges—namely, Tawairoa and Hauturu—lying between the West Coast and the Waipa basin, with their highest peak at Pirongia, which rises to 3,156 ft., and is often snow-capped. There are other ranges forming the watershed between the basins of the Waikato and Waipa Rivers, and dividing both from the streams running into the western side of Lake Taupo. Their highest peak is Pureora, rising to 3,793 ft. The eastern side of the land district is occupied by a very broken, forest-clad country, known as the Urewera Country, the average height of which is about 2,500 ft. It is practically unexplored, and, being still in the hands of the Natives, is not as yet available for settlement. To the east of Lake Taupo lie the Kaimanawa Ranges, of about 4,500 ft., and generally open on the ridges, with valleys clothed in beech forests. Nearly the whole of the Auckland Land District is indented on both coasts with harbours and arms of the sea, forming a cheap and easy means of access. Of rivers, properly so called, there are only two of any great length—namely, the Wairoa and Waikato. The first empties itself into the Kaipara Harbour, a large arm, or rather succession of arms, of the sea, giving hundreds of miles of inland water-carriage to all parts of the Counties of Hobson, Otamatea, Rodney, and Waitemata. This river is navigable from its mouth to its junction with its tributaries Wairua and Mangakahia, a distance of ninety-one miles from the sea,

and for forty miles it is navigable for ships of large burden. The River Waikato has a course of 200 miles, measured from its source in the Ruapehu Mountain through Lake Taupo to the sea on the West Coast. It is navigable for river-steamers for seventy-five miles from its mouth. Another river—the Thames, or Waihou—though of no great length, affords a valuable means of inland water-carriage, and is navigable for small steamers for twenty-five miles. Generally speaking, every part of the district has an abundant water-supply, now and then lessened for a short time at the end of a very dry summer.

Plains.

Of plains proper, this district has only the stretch of country called Kaingaroa, extending from the eastern side of Lake Taupo towards the Bay of Plenty, all more or less of a pumice formation; the valley of the Thames, which is generally level, the quality of the soil varying very much in different parts; and the Central Waikato basin, already thickly settled. Here and there in the North there are level plateaux of volcanic soil, more or less densely wooded, and along the main rivers there are stretches of level country, but there are no large plains of alluvial soil such as the Middle Island can show.

Lakes.

Of these, which add so much to the scenery of a country, this district possesses a fair share, there being eight principal lakes, with some twenty or more smaller ones. To the north of Auckland, in the Bay of Islands district, there is only one lake of any size, called Omapere, three miles by two miles, an old crater. In the Waikato are Lakes Waikari and Whangape, the first six miles and a half long by three miles across, and the second five miles by one mile. These lakes are generally covered with numerous wild swans and ducks, and, being both connected with the Waikato River by navigable creeks, form a convenient waterway for transport of goods to settlers living around their shores. All the remaining lakes of large size are within the watershed of the Thermal-springs District, and are mostly from seven to eight miles long, and from three to six miles wide, except Taupo Moana, the queen of the North Island lakes, which is twenty-five miles long and eighteen miles broad, with a depth of 500 ft. The scenery round its western shore is of the most romantic kind.

Forests.

The greater part of the Auckland Land District has been covered in the past with dense forests, which are now fast disappearing under the axe of the settler and being transformed into rich pasture-land. The only really good Crown lands fit for settlement in the North are still all covered with forest, and must be cleared and sown before any returns can follow. The area of forest-land in the Auckland District at the present time is about 1,800,000 acres north of Auckland, and 3,420,000 acres south of it. The forests contain a mixture of trees of all kinds, from the giant kauri to scrubby tea-tree or manuka, but all the bush is useful for building, fencing, and household purposes, or at any rate may be converted into charcoal for sale. Of the giant kauri (the most valuable tree in New Zealand) great quantities, worth as much as £400,000 per annum, are being yearly cut, and exported or used for home consumption. To give some idea of the size of these trees, and the amount of timber contained in them, it is estimated that upon the Crown land to the north of Auckland, in the Counties of Hokianga, Hobson, Bay of Islands, and Whangarei, there are still remaining 498,000,000 feet, of a value, as the timber stands, of £1,294,000.

Soils.

With respect to the soils of Auckland, nowhere in New Zealand within such short distances is there such a diversity in the quality—a distance of half a mile often makes all the difference between rich alluvial and barren pipeclay. To the north of the Bay of Islands and Hokianga the lands are chiefly clay and sandstone, with here and there a volcanic area intervening. In and about the valley of the Mangonuiowae River, in the Hokianga County, there is some of the richest

alluvial soil in the district; and, taking the whole Crown land remaining to the north of a line between the Hokianga and Bay of Islands Harbours, the really available good land fit for settlement would be about 40,000 acres. There are large areas outside of this which will carry good grass and feed one or two sheep to the acre, after clearing and laying down in grass; and there is also land highly suitable for fruit-growing. South of Hokianga, and between that place and the Wairoa River, the soil is, generally speaking, very good, being both volcanic and alluvial. Here the Crown has probably 200,000 acres of such land fit for settlement. Immediately south of the Bay of Islands, and extending thence to Whangarei, the soil is, for the most part, clay lying upon sandstone or marl, with alluvial flats in the bottoms of the valleys; but these are, as a rule, very narrow. Within the Puhipuhi State Forest there is an area, say, of 16,000 acres, more or less, volcanic soil, over a large portion of which a fire has run; having been surface-sown with grass, it is now carrying most luxuriant pasture. Approaching Whangarei, at Hikurangi, the limestone crops out, overlying coal-deposits, and round Whangarei itself the soil becomes a rich volcanic, in a high state of cultivation. South of Whangarei Harbour, and from thence to Auckland, the Crown lands generally are of a broken character, with soil varying from alluvial swamps—as in the case of the Tokatoka Swamp of 16,000 acres—to the limestone areas round Maungaturoto, the sandstone and clay lands of Rodney County, and the poorer clay-lands lying north of the City of Auckland, which have, however, proved eminently suitable for fruit-growing.

For about 200 miles south of Auckland the land (with the exception of the Cape Colville Ranges) is, generally speaking, far less broken, and gradually opens out into large tracts of level country in the Waikato and Waipa basins. Immediately south of Auckland the soil is rich volcanic until it is gradually superseded by the prevailing clays; the greater portion of Manukau County, for thirty miles south of Auckland, may be classed as pastoral, and is under occupation as such. The Crown areas available for settlement—say, 16,000 acres—are chiefly in the Otau Parish, varying from volcanic clay to ordinary clay land, forest-clad, and well adapted for pastoral purposes. In the Counties of Waikato, Raglan, Waipa, Piako, West Taupo, and Kawhia, there is a still greater diversity of soils; Raglan County contains large areas of good limestone country, broken, but with rich black soil, and carrying most luxuriant grass. The lower Waikato country consists of clay soil and extensive swamps, almost undrainable, but at a distance of eighty miles from Auckland is found a flat and undulating country, lying partly within the Waikato and Waipa basins, and partly within the valleys of the Piako and Waihou Rivers, formed mainly of alluvial deposits of rhyolite sands brought down from the volcanic districts. In the Kawhia County there are some 300,000 acres of excellent limestone land, a large portion of which is heavily timbered, with numerous warm valleys. Most of this land is now being acquired by the Government from the Native owners. Beyond this there is a large stretch of country consisting alternately of open valleys and forest-clad hills, a fair proportion of which is good land, both pastoral and agricultural. The County of Coromandel, with portions of Thames and Ohinemuri Counties, is chiefly devoted to the mining industry. The soil is nearly all clay, the land very broken, but suitable for pastoral purposes if cleared of the dense forest that now covers it. The western portion, however, of the Thames and Ohinemuri Counties contain large areas of alluvial and swamp lands, now in the hands of the Crown, but, through want of drainage, not yet available for settlement.

In the County of Tauranga, the clay lands extend from Te Aroha Mountain to Katikati entrance, changing, near Tauranga, to sandstone and black pumice soil of rich character, which improves towards Te Puke and Maketu, where the land is all good, and more or less volcanic. In Whakatane County there are very extensive swamps, of which large portions are drainable, and back from the coast seven miles or so are large areas of Crown lands, broken and forest-covered, open for settlement. The soil is chiefly clay or light loam, with alluvial flats in the valleys, and all well watered. This kind of country extends to the boundary of the land district. The coastal lands are nearly all alluvial flats in a high state of cultivation, and the settlers mostly well-to-do.

Review of Soils: Uses and Returns.

Briefly to set forth the capabilities of the Crown lands in the district, it will suffice to say that north of the Bay of Islands and Hokianga the land is suitable chiefly for two classes of persons—the gum-digger, and the fruit-grower or small farmer. The former has the range over large areas of Crown lands upon paying a small fee, and his earnings average from 5s. to 10s. a day. As for the latter, in and around Hokianga, with its 250 miles of water-frontage, almost anything can be grown, from the tropical banana to the more prosaic potato, whilst oranges and lemons flourish side by side with all kinds of apples, pears, and plums. Wheat does fairly well, and maize gives a return of fifty to sixty bushels an acre. Sheep also thrive; and most of the lands, when properly grassed with artificial grasses, will carry two or three sheep to an acre, but ordinary rough-grassed lands only one and a half to two sheep per acre. The clearing of forest-lands, ring-fencing and grassing them, will cost about £3 to £3 10s. per acre. The same remarks apply to the Bay of Islands and Whangarei, and to the country as far south as Auckland. Round about Whangarei district, and under similar conditions of culture, the average return for good agricultural or pastoral lands would be fully 12s. an acre per annum. South of Auckland, throughout the Waikato, Piako, Waipa, and Raglan Counties, and thence south to the district boundaries, the land is both agricultural and pastoral. All the cereals do well, wheat averaging 27 to 30 and up to 40 bushels per acre, and oats 26 bushels per acre. Potatoes average from 5 to 7 tons per acre. Dairy-farming is carried on, yielding (upon well-cultivated farms) a net profit of 15s. to 20s. an acre per annum; whilst sheep-farming yields a profit of from 5s. to 7s. 6d. a sheep per annum on very large estates; allowing for greater losses from disease, &c., the average return would still be 4s. per sheep. The cost of clearing fern and scrub is generally from 7s. to 10s. an acre, and laying down fern-land by surface-sowing and harrowing, about 17s. an acre.

The seaward counties of Tauranga and Whakatane are both agricultural and pastoral, growing wheat and maize alike to great perfection. In fact, the County of Whakatane, upon its alluvial shores and uplands, grows the greater portion of the maize produced in the district, and from the ports of Whakatane and Opotiki in one year some 34,000 sacks have been exported. In these counties the average yield of wheat is from 22 to 25 bushels per acre, oats about 29 bushels per acre, and maize 45 to 60 bushels per acre. It is quite possible within this district to select land early in the winter, fell and burn off by the ensuing summer, sow in grass in the autumn, and put on stock within twelve months from selection.

Rainfall.

The rainfall during the year averages about 39in., the greater portion of which, as a rule, falls between the 1st of May and 1st of November, or during the winter and spring months. Owing to the constant changes of wind, caused by the configuration of the coast-line, the shortness of the distance between the two coasts, and the influence, greater or less, of the trade-winds, it is quite common for one neighbourhood to have double the rainfall of another, even though the two be only twenty miles apart. Droughts of more than a couple of months are practically unknown, and grass is always abundant.

Winds.

One of the chief means whereby the great healthiness of the climate is maintained is the constant presence of fine breezes, blowing both summer and winter, the prevailing winds being north-east and south-west, and very seldom passing into really heavy gales. In the middle of summer, the sea-breeze during the day and the land breeze at night are almost unvarying.

General Products and Industries.

Timber.—The vast forests of kauri and other valuable trees have given this district the foremost place for production and export of timber. There are many safe and sheltered harbours for shipping, while streams and rivers without number form convenient highways for conveying logs to the mills or ports. Some idea of the

extent of this industry may be given by quoting from the official returns made at the time of the last census. There were then forty-nine steam saw-mills situated in various parts of the district, with engines of a total of some 2,000-horse power. These mills employed over a thousand men, and produced yearly some 80,000,000ft. of sawn timber, valued at £301,328; of timber resawn into flooring, skirting, &c., some 21,000,000ft., valued at upwards of £91,000, not to mention posts and rails, mouldings, sashes, and doors. Besides this output, in the remoter parts of the district large quantities of timber are hand-sawn. The durable puriri is converted into railway-sleepers, for which there is a great demand, and the totara is largely sought after for telegraph-posts and wharf-piles.

Kauri-gum.—The most unique production of this portion of the colony is kauri-gum, obtained for the most part from the country north of Auckland. It is formed by the hardening of the exuded turpentine from the kauri tree, and is dug out of ground from which the forest has been burnt off. The Royal Commission lately appointed elicited the fact that in 1893 the procuring of the gum gave employment to no less than 6,897 persons. Last year 7,126 tons were exported, valued at £431,323. The kauri-gum is extensively used in the manufacture of varnish, and also for glazing calico. Nearly two-thirds of the varnishes in the market are produced from this gum. The average earnings of a digger may be taken as from £1 7s. to £1 10s. per week.

Flax (*Phormium tenax*).—An industry, which is for the present in a languishing condition, is the conversion of the broad leaves of the *Phormium tenax* into marketable flax suitable for the manufacture of rope, twine, mats, mattresses, and numerous other articles. The flax-mills are scattered over different parts of the district, as near rail- or water-carriage as possible, and employ about eighty men and boys, whilst the local rope-and-twine works give work to some forty more.

Gold.—This district has in the past produced large quantities of gold, but the area over which auriferous quartz-reefs have been discovered is limited to the Counties of Coromandel, Thames, Ohinemuri, and a small portion of Piako. In 1896 the output of this neighbourhood was 35 per cent. of all the gold produced in New Zealand, the quantity (92,346 oz.) entered for duty for exportation having been valued at £350,355. From 1878 to 1892 the Thames Goldfield alone produced some 600,000 oz. Now that the area over which auriferous quartz-reefs have been discovered has increased, a much larger output may be expected in the future. The total estimated value of the gold was £358,317 for 1896-97, against £378,107 in the previous year. All the gold won was obtained by battery amalgamation, and the bullion by the cyanide process. There is a large amount of English capital being expended in developing new discoveries in out-districts away from the goldfield, but it will be some time yet before these discoveries have reached their full development. At the Thames there is a School of Mines, well attended and showing good results.

Coal.—Coal is found in most parts of this district, and is being worked with more or less success at Kawakawa, Hikurangi, Kamo, and Ngunguru, to the north of Auckland; whilst in the south there are three mines at Huntly, all turning out a good household coal. The total output of all the mines in 1896 was upwards of 139,000 tons.

Fruit.—The climate of the Auckland District is well adapted for the growth of the orange, lemon, vine, and olive, as also for the fruits of England, America, and Japan. The subtropical kinds flourish about Hokianga, in the north; those of the temperate regions, in the Waikato and neighbourhood. Now that the problem of how to land fruit in good condition in the London market has been solved, orchard planting is rapidly progressing, and it has been found that the culture of the hard varieties of the apple will repay export to England. Of late years a demand has set in for the poor clay-land that used to contain gum, as it is admirably suited for fruit-growing. Orchards are now planted in neighbourhoods where the soil has lain idle for years, for it has been proved that apples grown on this poor soil keep longer than those grown on richer land. More attention is being just now paid to stone fruits, for which there is always a steady local market, than to apples, which have

of late years been heavily handicapped by blight. The fruit industry in Auckland is yet in its infancy, and is capable of great extension. At present peaches are the only fruit canned, though there is also a good deal done in the way of drying fruits and vegetables by the process of evaporation.

Fishing.—The sea and harbours abound in fish. At least eighteen different varieties, suitable for the table, are caught with little labour, and settlers living near the sea-coast, or any one of the many harbours and tidal rivers, can always obtain enough for all necessities. At present the canning industry is confined to mullet, of which there is a large amount exported, and an equal quantity used for home consumption. The rock-oyster is found over a large area on these coasts, and large quantities are sent both to the southern ports of the colony and also to Australia.

Chief Centres and Surrounding Districts.

The City of Auckland lies on the southern shore of the Waitemata Harbour, one of the finest havens in the colony, on a narrow neck of land between the Waitemata and the Manukau. Alike from the sea and from the neighbouring hills the city and surrounding country present a charming picture. Especially fine is the view from Mount Eden, a low volcanic hill in the suburbs. Facing the town are the green hills and white houses of the North Shore, and the remarkable peak of Rangitoto; beyond lie the many islands of the Hauraki Gulf, with the blue hills of Coromandel and the Great Barrier in the far distance. Clustered near the foot of the hill, and scattered for many miles to the southward, are charming villa-like houses, with tasteful gardens and shrubberies, while to the north-west the view is closed by high wooded ranges. The city is unrivalled for its commercial position; it has communication by sea with both sides of the Island, while the Kaipara and Wairoa Rivers leading far into the northern peninsula, and to the south the Waikato and Thames Rivers leading into the heart of the Island, give it excellent natural facilities for inland communication. In April of last year the population of the city and suburbs amounted to 57,616 persons. The city is well supplied with gas and water, and amongst public buildings may be noticed Government House, the new Government Offices, Post and Telegraph Offices, Supreme Court, &c. There is a Free Public Library and Art Gallery, and a good Museum, containing what is probably the best Maori collection in the world. The Auckland University College is affiliated to the New Zealand University. The Victoria Arcade, the Exchange, Harbour Board Offices, hotels and clubs, as well as many commercial buildings, compare favourably with those in other parts of the colony. There are admirable recreation-grounds, including the Government Domain of about 180 acres, as well as the Botanic Garden and the Albert Park in the centre of the city. There is a tramway system extending through the suburbs. Auckland has numerous industries, including, amongst others, ship-building, sugar-refining, timber-converting, sash-and-door manufactories; rope-and-twine, pottery, brick-and-tile, and varnish works, printing-offices, &c.

The City of Auckland is the centre from which radiate all railways, road-, and steamer-routes. From it, by rail, lies the way to all Crown lands south of the Waitemata, while the Kaipara Railway connects it with the country north of Helensville. All lands to the north and along the Bay of Plenty are reached from its wharves by the Northern Company's steamers. The chief centres to the north are:—

Warkworth, on the East Coast, forty miles from Auckland, with communication by coach and steamer nearly every day. It is a thriving township, with post- and telegraph-office, public halls, hotels, &c., and is the starting-point for the Tauhoa and Pakiri Crown lands. It is also the site of important hydraulic-lime and cement works. A good deal of agricultural and pastoral farming is carried on in its neighbourhood.

On the West Coast an important centre is Helensville, on the Kaipara Harbour, distant thirty-six miles from Auckland, with which it is connected by rail. It has all the conveniences required by travellers in the shape of good hotels, stores, &c., and is the starting-point of the river-steamers running to all places in the Otamatea and Hobson Counties. It is also one of the main centres for sawmilling, and for the export of balk timber by large vessels to other colonies, and has several flax-mills.

Dargaville, on the Wairoa River, is a town of about 400 inhabitants, with all conveniences for travellers. It may be reached by rail and steamer from Auckland three times a week. Dargaville is the starting-point of the Kaihu Valley Railway, which is open for traffic for twenty miles from the town, and from the terminus of the railway all the Crown lands in the neighbourhood are reached, even so far north as Hokianga. The town is also the centre of a very large timber export. There are only two townships of any importance north of Dargaville—Port Rawene, or Hokianga, and Kohukohu, about four miles further up. Both have post- and telegraph-stations, and comfortable hotels, with fortnightly steam-communication from Auckland.

Whangarei, on the East Coast, is distant seventy-five miles from Auckland, with which it has steam-communication twice a week. The town is a thriving and important place, having a population approaching 800, and is the centre of a large agricultural and pastoral country. In the neighbourhood is also a large coal-bearing and gum-producing district, while the export of oranges and lemons, which thrive magnificently on the rich volcanic soil, is increasing fast. From here a coach runs weekly to Kawakawa, upon the arrival of the Northern Company's steamer, and from it, by carriage or horse, all lands can be visited within a radius of thirty to forty miles.

Kawakawa, at the head of the tidal portion of the river of the same name, is connected by a short railway-line with Opua, the calling-place of steamers from Auckland. Kawakawa possesses good inns. From it coaches run weekly to Hokianga and Whangarei. It is the centre of a coal and gum industry, and a port of lading for those products. The old town of Russell is situated further down the bay, and has good inns, besides having a post- and telegraph-office. To Whangaroa and Mongonui the Northern Company's steamers run every week. Whangaroa is famed for its exquisite scenery, and is the centre of a large timber- and gum-export trade. Mongonui is the starting-point and centre from which to visit, by carriage or horse, all the Crown lands in the Mongonui County, and from it the steamer "Staffa" runs to Awanui and ports beyond, in connection with the weekly steamer from Auckland.

South of Auckland, along the Waikato Railway, there are numerous townships of more or less importance, but no starting-point for Crown lands, until Mercer is reached at a distance of forty-three miles. It is situated at the borders of what is known as the Waikato Country, upon the Waikato River, which is tidal up to this point, and the township has a post- and telegraph-office and other conveniences. At sixty-five miles from Auckland by rail is Huntly, also on the Waikato River, a flourishing township, with a very large output of valuable coal. It has also pottery-, brick-, and tile-works. On the opposite side of the Waikato River large areas of Crown lands are being brought into use, and are carrying many sheep and cattle. The next town is Ngaruawahia, or Newcastle, seventy-four miles from Auckland, situated at the junction of the Waikato and Waipa Rivers, with hotels, bank, post- and telegraph-office. It is a centre from which portions of Crown lands in Raglan County are reached, and also from it river-steamers run north and south to the various settlements. Ngaruawahia has a flourishing creamery, a brewery, and a cooperage. At eighty-four miles from Auckland the train reaches Frankton Junction, where a line branches off to Hamilton, Te Aroha, and Oxford, the main line going to Te Awamutu, ninety-nine miles from Auckland. The latter is a thriving town; but to reach available lands for future settlement the traveller passes on by rail to Otorohanga and Te Kuiti, fifteen and twenty miles further on respectively, at both of which places there are accommodation-houses, forming convenient centres for visiting the fertile undulating limestone lands in the vicinity. Hamilton is a busy, flourishing town, situated on both sides of the Waikato River, with a population of about 1,300 persons, and is the centre of a large agricultural and pastoral district. It possesses a creamery, flax-mill, brewery, and two soap-factories, besides other local industries. Cambridge, about thirteen miles by road and fifteen miles by rail from Hamilton, has a population of about 900, and is the headquarters of the Farmers' Club. It is a busy, thriving township, surrounded by good farming country. Between Hamilton and Cambridge, and in the country

round, there are numerous creameries, cheese- and butter-factories; wine- and cider-making is also successfully pursued, and there are several apiaries, from which large quantities of honey are produced. There are three flour-mills in the district, one at Cambridge, one at Hamilton, and the third at the terminus of one of the before-mentioned branch lines. One hundred and sixteen miles from Auckland by rail is Te Aroha, a quiet township, celebrated for its thermal springs and good hotels.

The settlements at the Thames and Coromandel are essentially mining townships. The first is situated thirty-eight miles by steamer from Auckland, on the Firth of Thames, and at the mouth of the Waihou River. It has a population of about 5,500 persons. There is daily steam-communication with Auckland, and a railway connecting it with Paeroa and Te Aroha. Coromandel is about thirty-five miles from Auckland, with which it has constant communication by steamer; it is another mining centre, situated at the head of a picturesque harbour. Tauranga, with a population of about 1,020, is situated on the harbour of that name in the Bay of Plenty. Coaches run thither from the Thames, and from Rotorua; it has also constant communication by steamer with Auckland, and with Matata, Whakatane, and Opotiki. From the fact of the harbour being the only one on the East Coast capable of receiving large vessels the town is bound to be of importance in the future. Tauranga has a new and well-appointed flour-mill upon the Waimapu River, also a chemical and sulphuric-acid works, and a cheese factory.

Opotiki, the second town of importance in the Bay of Plenty, is situated about sixty-five miles by steamer or road from Tauranga. It has weekly steam communication with Auckland, and is connected with Gisborne by a bridle-track. It is the headquarters of the maize-producing district, and has rich alluvial lands, from which good returns are obtained. It is a good starting-point from which large blocks of Crown lands suitable for pastoral purposes may be reached.

The Township of Rotorua is situated on the shores of Rotorua Lake, at a distance of 172 miles from Auckland. Since the railway from Oxford was opened travellers can now reach Rotorua in one day from Auckland. It is the chief township in the hot-lakes district, and has also a large area of fairly good Crown land near, adapted for pastoral purposes. Considerable quantities of sulphur are obtained from the neighbourhood.

Crown or Native Lands available for Future Settlement.

In the Mangonui County the Crown possesses 106,700 acres of fairly-good forest-land, tolerably easy of access.

In the Bay of Islands County there are only about 24,600 acres of available Crown land, both forest and open, but the Natives still own some 152,000 acres, chiefly forest land, except about Kaikohe, where it is open and rich volcanic land, most of it broken, but fit for settlement.

In Hokianga County there are some 147,550 acres of available Crown land, of good quality, nearly all covered with forest, and fit for immediate settlement. The Natives still own some 126,000 acres, almost all good land, and fit for settlement.

In Whangarei County there are about 59,175 acres of available Crown land, mostly broken and forest-clad. The Natives still retain some 51,400 acres of land, part of it very rich.

In the Otamatea County the Crown retains only about 14,540 acres, a good deal of this being alluvial swamp, and well worth draining. The Natives still own about 20,000 acres, but not much of it is fit for settlement.

In the Rodney and Waitemata Counties about 15,162 acres of Crown lands are left, most of it fit only for pastoral or fruit-growing purposes. The Natives still own about 14,000 acres in these two counties, some of it very good land.

In the Manukau County the Crown owns some 22,035 acres of broken forest land, fit for pastoral purposes. The Natives still own about 15,000 acres, a portion of which is fairly good.

In the Waikato and Raglan Counties the Crown lands amount to about 55,780 acres, all fairly good land, mostly forest, and easy of access. In Raglan

County the Natives still own the freehold of 150,000 acres, all good land, but difficult to secure.

In the Coromandel, Thames, and Ohinemuri Counties there are about 42,850 acres of available Crown lands. In the last two counties a good deal of the land is swampy, and requires draining. The Natives still own 27,512 acres, much of which is very good.

In Tauranga, Whakatane, and Rotorua Counties the Crown owns 487,075 acres, nearly all forest-clad, and generally broken; but in the last-named county the Natives retain a very large area, the greater part too broken or too much covered with pumice or volcanic ash to be fit for settlement.

In the Kawhia and West Taupo Counties the Crown is acquiring from the Natives large areas of very good land, all fit for settlement and easy of access. About 300,000 acres are really first-class land, and about 1,000,000 acres fairly good land, all suitable for pastoral purposes, and accessible from the Main Trunk Railway-line.

THE TARANAKI LAND DISTRICT.

J. STRAUCHON, Chief Surveyor.

The Taranaki Land District is situated on the western side of the North Island of New Zealand, at about its widest part, and may be said to be the most compact and fertile district of the colony, for, with the exception of the upper half of Mount Egmont, and of the ranges adjoining, which absorb about 36,000 acres, the whole of the area—minus what is taken up by the rivers, streams, and lakes—is suitable for settlement, and certainly two-thirds of the district is good land. The gross area of the district is 2,430,000 acres.

Physical Features.

Of mountains, the principal one is the beautiful volcanic cone from which the district takes its name, Taranaki, otherwise called Mount Egmont, which has an altitude of 8,260 ft. This mountain is the centre of distribution for a radius of twenty miles of the volcanic formation known as the "drift," which covers the volcanic rocks below an altitude of 3,000ft. Hummocks composed of trachyte boulders and cement crop up here and there and make excellent metal-quarries.

Beyond the volcanic formation—that is, from about Urenui on the north and Hawera on the south—the country is generally broken, and the formation is known as papa, a calcareous blue clay, capped in many places by shelly limestone.

The northern portion, between the Tongaporutu and the Mokau Rivers, contains also limestone, greensands, and coal outcrops. At Panirau, a small tributary of the Mokau, about thirty miles from the sea, there is an isolated patch of volcanic agglomerate and tufas, and a similar formation is found at the north-eastern corner of the district.

Eastward of the base of Mount Egmont there are few, if any, mountains worthy of the name, although there are many ranges varying in height from 1,000ft. to 1,500ft. above sea-level, and, in a few instances—such as the Matemateonga and Waiaria Ranges—they run up to 2,500 ft.

The principal river is the Wanganui, which bounds the district on the east between Taumaranui and Pipiriki, a distance of about ninety miles. Its average width varies from 2 to 3 chains. For nearly the whole distance it is shut in by high precipitous hills, and in many places by perpendicular walls of rock. The scenery is very grand and beautiful. There are numerous rapids, but few of them are dangerous to skilful canoeists. A steamer runs regularly from Wanganui to Pipiriki, a distance of fifty-five miles. Another small steamer of light draught and considerable power is now being built. This is intended for opening up the tourist and trade traffic on the upper portions of the river between Pipiriki and Ohura, a distance of some sixty miles. A channel is now being snagged up the Tangarakau River as far

as Putikituna, a distance of twelve miles. From this point it is proposed to construct nine miles of road to join the Ohura (or East) Road at a point about forty-seven miles from Stratford, and in the middle of the Whangamomona Improved-farm Settlement, the settlers in which and surrounding blocks will thus have double communication, with Wanganui on the one hand and Stratford on the other. When the road is completed through to Auckland (say within the next two or three years) tourists can enjoy a trip up the Wanganui River as far as Ohura, then back, and up Tangarakau River across to Ohura Road, then on to Auckland, or back to Stratford, as they desire. The principal tributaries flowing into the Wanganui on the Taranaki side are the Whangamomona, at eighty-two miles; Tangarakau, at eighty-five miles; Ohura, at 114 miles; Ongaruhe, at 143 miles respectively from the Town of Wanganui.

The next river in size is the Mokau, bounding the district on the north. It is navigable for small steamers of 20 tons or 30 tons as far as the coal-mines, about twenty miles from its mouth, and for canoes as far as Totoro, twenty-six miles further up. Several outcrops of coal are found on its banks, and, as limestone is also present, the river is likely to become the most important waterway of the district. The scenery on either side, although not on quite so grand a scale as may be seen on the Wanganui, is very beautiful.

The other large rivers are the Waitara and Patea. The former has its source about midway between the coast and the Wanganui River, in an easterly direction from Pukearuhe, between New Plymouth and the Mokau. It is about a hundred miles in length, and runs out at the Town of Waitara, some ten miles north-east from New Plymouth. There is a bar at the mouth, but steamers of 300 tons can enter safely in calm weather, and, although there are numerous rapids on its course, it is navigable for canoes for about ninety miles.

The Patea River rises in Mount Egmont, and, after traversing a tortuous course of about 110 miles, runs out at the extreme southern end of the provincial district. It has a bar-harbour, with a depth of 13ft. to 14ft. at spring-tides. Steamers of from 40 tons to 50 tons trade regularly to the town of Patea, which is situated a mile or so north of the mouth. The Patea is navigable for canoes for fifty miles.

Besides these rivers there are many smaller ones, and streams innumerable—in fact, no district in the world could be better watered and at the same time so secure from disastrous floods. It is estimated that between the Mokau and the Patea there are no fewer than eighty-five named streams emptying themselves into the Tasman Sea, fully sixty of which flow from Mount Egmont.

Excepting the Ngaere Swamp, a block of open land near Eltham, 3,700 acres in extent, now partially drained and recently disposed of for settlement purposes, there are no plains, properly so called, in the district, although the stretch of very fertile country lying between the Waingongoro and Otakeho Rivers, comprising an area of about 25,000 acres, is known as the Waimate Plains. Of this area 13,500 acres have been disposed of, and the remainder, 11,500 acres, has been handed back to the Natives as a reserve.

There are no lakes worthy of the name. The largest sheet of water is Rotokare, situate about twelve miles from Eltham; it is about half a mile in length, with an average width of six chains. There are also a few small lakes inland from Waverley, at the southern end of the district.

The whole of the district, with the exception of a fringe of open country along the coast from Pukearuhe to Patea, averaging three miles in width, and containing about 250,000 acres, and some valleys at the north-eastern corner of the district, about 150,000 acres in extent, was originally covered with heavy forest. Estimating the area already cleared for settlement at 210,000 acres, it will be seen that there still remain about 1,630,000 acres under bush.

The larger timber is chiefly rata, rimu, matai, tawa, kahikatea, kohekohe, pukatea, rewarewa, hinau, with a few totaras scattered here and there. Among the smaller trees may be mentioned the kotukutuku or fuchsia, karaka, and mahoe.

As regards the timber industry, there are altogether twenty-two saw-mills, and the total quantity cut in 1896 was 12,422,000 ft., chiefly rimu (red-pine), kahikatea (white-pine), and matai (black-pine).

An area of 72,565 acres, measuring six miles on every side from the summit of Mount Egmont, has been set apart as a forest-reserve. At about two miles within the reserve the forest begins to get stunted; and at three miles it gives place to low wiry scrub, which ceases at four miles, or an elevation of about 4,000 ft. At 5,000 ft. the moss ends; beyond this point to the summit the mountain is composed of loose scoriæ and lava.

A comfortable mountain-house has been built at an elevation of 3,200 ft. on the northern face of the mountain, at a distance of nineteen miles from New Plymouth by the Junction and Egmont Roads. Fifteen miles can be driven over, and the remaining four ridden. This house is maintained by the North Egmont Forest Board of Conservators, and is open for the accommodation of visitors from the middle of December to the end of March in each year. The keeper acts as guide also. There are women's rooms at one end of the house, men's at the other, with large common living- and dining-room in the centre. Visitors provide and cook their own food; a small charge is made of 2s. if stay is for one night only; if for longer, then 1s. per night throughout the visit. Guide's fee for mountain, £1 per party. During the past season there were 283 visitors, remaining various periods of from one or two days to as many weeks, while the total number of visitors to the mountain was for the season 520. In fine weather, when the snow is off, the mountain can be ascended without risk.

The mountain can also easily be ascended from Stratford side, the return journey occupying about thirteen hours, including stoppages. Tourists can ride over the first twelve miles to a rough shelter-shed near the grass-line, altitude 4,325 ft.: time occupied, about three hours. Here the horses are left, and the remaining climb has to be done on foot: time required for fair walker, a good three hours, although, coming down, the distance can be done in two hours. 436 persons visited the mountain by this route during the season. Good hotel accommodation, guide, horses, and provisions, can be obtained in Stratford on reasonable terms. The return trip can be varied by visiting Dawson's Falls and Kendle's Cascade.

Another route now coming into favour is from Hawera or Eltham *vid* Manaia or Kaponga and Dawson's Falls. At the latter place a comfortable shelter-house, capable of accommodating over thirty people, has recently been erected (altitude, 2,990 ft.). This house, which is close to the Falls (65 ft.), is within an easy two hours' ride of Kaponga. During the season the house is in charge of a caretaker, and food, bedding, horse-feed, and paddocking can be obtained. The number of visitors to Falls and mountain by this route is said to have been about a thousand for the season. From the house to top of Mount Egmont occupies a good six hours' climbing at a moderate pace. From the top, where the whole Taranaki District lies spread out to view at one's feet, the tourist can, instead of returning by same route, drop down to the mountain-house on the north or New Plymouth side of and 3,000 ft. up the mountain. The walk would not occupy over two hours, easy walking.

Soils.

The volcanic soil, the boundaries of which have been already described, varies a good deal in quality. The best is believed to be on the south side of the mountain, between Stratford, Hawera, and Opunake, but not less than two or three miles from the forest-reserve boundary. It is thought that the country now being opened to the north and east of the volcanic deposit—that is, the papa and limestone formation—will, from the presence of lime, be much richer and more lasting as pasture-land than that around the mountain. The carrying-capacity of the land is, on an average, three sheep to the acre.

Dairying, Grazing and Agriculture.

Taranaki is essentially a grazing and dairying district, its chief products being butter and cheese, of which, during the year 1896, there were 3,228 tons exported, valued at £276,443. There are forty-seven registered dairy-factories and thirty-three creameries scattered over the district, besides numerous smaller private ones of which we have no records. Of those registered, thirty-one produce butter only, ten

combine butter and cheese, and six cheese only; forty of the factories and creameries are proprietary companies, while the other forty are run on co-operative lines: the total output of these, last season, to 31st August, being 1,786 tons butter and 1,124½ tons cheese. This return does not include unregistered producers on farms, &c. The enterprising owners of the Crown Dairy Company also propose during 1897 to establish a factory for the manufacture of condensed milk, the necessary plant for which has been ordered.

In September, 1896, a new work in connection with the dairying and meat industries was started in the shape of the Taranaki Freezing Works. They are situated at Moturoa, near the breakwater, and close alongside the railway-line. Substantial buildings have been erected, and a railway siding laid down. The machinery consists of a "Paxman" compound surface-condensing engine of forty indicated horse-power, driving a "Livide" compressor, capable of freezing 400 sheep per diem: although up to the present time the company has confined its attention wholly to the freezing of dairy produce, 59,264 packages of butter and 6,570 cases of cheese having been sent from the works to the Home market, besides 1,000 packages of butter for the local and Australian markets. During the hot season the factories and railway-vans carrying butter have been supplied with ice from the works at a nominal cost.

Another somewhat similar industry has just been commenced at Fitzroy, called the Taranaki Bacon Factory. Substantial buildings have been erected, and a 6-horse power "Livide" machine fitted up, and the owner, Mr. Drake, hopes to have the works in full swing during the season of 1897. The pigs are purchased from the farmers in the district and delivered at the styes in connection with the factory, where they are topped off with corn-feeding for fourteen days before being slaughtered. An industry like this should prove a boon to all dairy-farmers, and should be vigorously supported by them.

There are in the Taranaki Provincial District 17,912 horses, 201,518 cattle, 402,258 sheep, and 17,672 swine. These figures include all kinds and ages.

Agriculture has not hitherto been carried on largely. The total area under grain-crops (for threshing) was 8,203 acres; under green and other crops (including those cut for chaff, green food, and ensilage, also root crops, gardens, and orchards), was 14,205 acres; area in sown grasses, 595,878 acres; total under all kinds of crops, 618,286 acres, 617 acres fallow land, and 1,397 acres of forest-tree plantations.

The average yield of different grain-crops in bushels per acre, as estimated for season of 1896-97, is: Wheat, 30; oats, 33; barley, 32; rye, 23.

Mining.

The only mining going on at present is at the Mokau Coal-mine, which is situated on the Mokau River, about twenty miles from the sea, the river being navigable right up to the mine for vessels of 6 ft. 6 in. draught. This mine recently changed hands, and is now held by a Scottish company, known and registered as "The Mokau Coal-mines Syndicate (Limited)," which occupies under a sixty years' lease from the Native owners. The coal is of best class of pitch brown, and is rapidly gaining favour as an excellent household coal, and is also good for steam purposes. Eight distinct seams of this coal are already known, one overlying the other, and varying in thickness from 2½ ft. to 8 ft. The one now being worked is the fourth of the series, and 8 ft. thick, with a 6 in. band of slate in middle, but this band is rapidly running out. At the entrance to the drive, which runs some 15 chains into the hillside on an upward incline of 1 in 24, and is laid with the usual light mining rails, on which the trucks are worked by horses, the altitude above level of the river is about 40ft. The broken ground has now been passed through, and a face of 250 ft. of good sound coal exposed. It is proposed to sink on the lower seams to test their thickness and quality. Ten men are at present employed, and the coal continues to improve. The output for 1896 was only 1,943 tons. The operations of the company have been greatly hindered through loss of two small steamers at sea. Extensive improvements have, however, been made in the shape of new buildings, in relaying the lines with iron rails, and in

pushing on the construction of a new air-drive, which, when finished, will be sufficient to thoroughly ventilate all the workings for years to come. The company hopes to have one or more steamers in the trade again shortly. A considerable amount of work has been done both by the Government and coal company in snagging and opening up the river for traffic, which must also prove of great advantage to the lands on both sides for miles above the mines. A signalman has been appointed at the entrance of the river.

After a lapse of many years, boring for petroleum has been resumed. A new bore was sunk at Moturoa, close to the former bore, and at a depth of about 875 ft. oil was struck in considerable quantity. After fully testing this well, it was found that it was impossible to "shut off the water" from below, which seemed to rise and fall with the tide, thus indicating the existence of some fissure or other means of inlet from the sea. The result was that only about two or three barrels, of 42 gallons each, could be got per day, the oil rising at intervals only, and all efforts to pump having continuously failed. The company then chose a site about half a mile inland, and sank a bore to the depth of 1,534 ft. without, however, obtaining any oil. A third bore, which is still open and cased, was then sunk about a quarter of a mile from the first, and in this gas in a great volume was struck at about 908 ft., followed at 910 ft. by oil in great quantity and of excellent quality. Unfortunately, this was struck in soft papa, and after about twenty barrels had been pumped, and when the company was beginning to sell and to export its crude petroleum, the supply suddenly ceased. The gas, which had previously issued in sufficient quantity to enable the company to dispense with other fuel, ceased at the same time. The most probable explanation of this mischance is that the soft papa, of which the roof of the oil-seam is composed, having been deprived of the support of the formerly imprisoned gas and oil, has collapsed, and thus choked the oil-seam lying in the vicinity of the bore. After further efforts to pump out the mud filling the bore, the company resumed drilling with the hope of obtaining another oil-supply at a greater depth. At 1,384 ft. oil was obtained in small quantities, and gas was thrown up in great volume. At 1,865 ft. the bore passed through the sedimentary papa rock and entered sandstone, which continued to the bottom at 1,976 ft., where a large quantity of oil and gas was struck. The bore was cased with 6-in. casing down to 1,379 ft., where a thin hard streak of sandstone was found embedded in the papa, and was taken advantage of to shut off the water from above; but, unfortunately, water was again met with below this, and as no other hard stratum was passed between that and where the oil was struck, it was found impossible to shut off the water, although a 5-in. casing was sent right to the bottom. Packing was also tried several times. Each time the packer succeeded in shutting off the water for a few days when oil was pumped at the rate of about eight barrels per diem; the sides of the bore around the packer, however, kept crumbling away each time, and the rush of water from above effectually prevented further pumping of oil, and the company was reluctantly compelled to abandon this their third bore, the plant being unequal to deeper boring. Undaunted by frequent failures, another bore has been commenced about 100 yards further west, and at time of writing this bore is down some 700 ft., the strata passed through being similar to those in last bore, but considerably harder. It is expected oil will be struck in papa at between 900 ft. and 950 ft., but it will probably be necessary to go down 2,000 ft. to clear the papa deposit. The local directors are in favour of extending boring operations inland, including procuring a second plant and an additional staff of borers; but, as the difficulties are numerous and disappointments frequent, it is doubtful if the necessary capital will be forthcoming.

An enterprise like this, if successful, would enrich and give an immense impetus to the trade and importance, not only of the district, but also of the colony generally. Should the efforts now being made be abandoned through lack of capital, it is unlikely that further steps will be taken for many years to further test the value of these deposits, of the existence of which there can be no doubt.

Ironsand is found in great abundance on the seashore from Mokau to Patea, a distance of 130 miles. It produces, when smelted, from 50 to 60 per cent. of iron of the finest quality. The first attempt to smelt this sand was made in 1848, and

several trials have been made since, but the heavy cost of production and the absence of capital and modern appliances have, so far, retarded the industry. Strong efforts are now being made to remedy this by the introduction of outside capital, and it is hoped these will shortly be successful.

Climate.

The climate of Taranaki is remarkably healthy, without any extremes of temperature. Below is given a table of mean, maximum, and minimum temperatures in shade for each month of the year ending December, 1896:—

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mean temperature	64·0	61·6	65·0	59·1	54·0	51·9	49·7	48·8	53·7	53·5	56·1	63·1
Max. temperature	81·0	79·0	79·0	76·0	71·0	66·0	64·0	63·0	70·0	67·0	72·0	80·0
Min. temperature	46·0	42·0	45·0	38·0	33·5	34·0	37·0	30·0	35·0	33·5	36·0	45·0

The mean barometric reading was 29·86 in.

At New Plymouth, rain fell on 186 days during the year, the total rainfall being 66·66 in., or an average of 5·55 in. per month. But the rainfall varies considerably with the locality; for instance, at Norfolk Road, near Waipuku, the highest point of the railway, about east from Mount Egmont, and twenty-four miles south-east from New Plymouth, the fall for the year was 106·61 in., while rain fell there on 208 days. The average yearly rainfall at Norfolk Road during the past five years equals 122·57 in.

Chief Towns.

The principal town of the district is New Plymouth (population about 3,850), situate on the seashore, about two miles from and to the north-east of the picturesque rocky islets known as the Sugar Loaves. The general appearance of the town is very attractive, and it abounds in neatly-kept gardens. The Recreation Grounds, from which a good view of Mount Egmont is obtained, form a favourite resort.

New Plymouth is 252 miles by rail from Wellington, the railway running in a northerly direction through the district from Patea to Sentry Hill, where it turns at right-angles westward for eight miles to New Plymouth. From Sentry Hill there is a branch line to Waitara, four miles distant.

The Port of New Plymouth is situated at the Sugar Loaves, two miles from the town. Protection for shipping is afforded by a concrete mole or breakwater running in a north-east direction for a distance of 1,900 ft. Under the lee of this there is wharf-accommodation provided for the coastal trade. Steamers of 500 tons can be berthed here in almost all weathers. The wharf is connected with New Plymouth by both rail and road. The breakwater was built at a cost of £200,000, borrowed under security of one-fourth of the land revenue of the Provincial District of Taranaki, and the right to levy a rate over certain lands. The present rate levied is ¾d. in the pound on the capital value. The principal exports for the year (by sea and rail) were: General merchandise (mostly dairy produce), 3,973 tons; wool, 884 bales; hides, 3,991; grass-seed, 472 tons; horses, 278; cattle, 3,774; sheep, 892; timber (by sea), 6,500 ft. Value of over-sea exports only, £204,612. Imports by sea: General merchandise, 9,863 tons; flour, 1,283 tons; grain, 1,283 tons; potatoes, 247 tons; coal, 2,590 tons; timber, 114,300 ft.; cattle, 76; vehicles, 29. Value of imports from over sea, £35,963. During the year 378 steamers, of a gross tonnage of 96,931 tons, also two sailing vessels of 193 tons, visited the port.

Manufactures in New Plymouth are represented by a sash-and-door, a boot, butter-keg, and three coach-factories, a brewery, a cordial, and also a patent stopper-factory, a flour-mill, tannery, fellmongery, bone-mill, and iron-foundry, with freezing-works and bacon-factory in the suburbs. The town has both water and gas laid on.

Hawera, the next largest town, is situate on the eastern edge of the Waimate Plains. The population is about 1,800. The Wellington–New Plymouth Railway runs close to it, the distance by rail from New Plymouth being about forty-eight miles. Hawera is surrounded by a first-class dairying and grazing country, capable of carrying a very large population.

The Town of Patea is situated on the coast, at the extreme southern end of the district, and has a population of about 750. There is a splendid grazing district inland, with a large area of land yet to be opened up. The principal industry is the canning, freezing, and boiling-down of meat. A dumping-plant has been erected by the Harbour Board. Exports for the year were: Wool, 5,086 bales; fungus, 147 bales; tallow, 950 casks; pelts, 180 casks; hides, 3,402; corn, 10 tons; grass-seed, 1,899 sacks; butter and cheese, 5,357 boxes; flax, 306 tons; tinned meats, 4,542 cases; cattle, 70; sheep, 209; bone-dust, 385 tons; potatoes, 346 tons; sundries, 82 tons. Gross value, £113,784. Imports: General merchandise, 5,314 tons; coals, 452 tons; number of steamers in and out, 128.

Stratford, a comparatively young town, lies about midway between Patea and New Plymouth. It has already a population of about 1,300, and is growing fast. The height above sea-level is 1,000 ft., and the climate is bracing though somewhat moist. The main road to Auckland—known as the Stratford-Ongaruhe (now Ohura Road)—starts here. It has been formed as a cart-road for thirty-eight miles, and as a bridle road to fifty-three miles. If the work is continued energetically, communication with Auckland should be opened up in about three years' time.

Waitara, a small seaport town of 500 inhabitants, is situated on the river of the same name, a mile up from the sea, and about ten miles north-east from New Plymouth. The meat-freezing works have been reopened, and during the year exported 1,039 tons of frozen meats, 20,267 boxes of dairy produce, 2,204 bales wool, and 124 tons tallow. These Egmont freezing-works possess two powerful Haslam freezing-machines, capable of freezing five hundred bullocks per month; they are also gazetted a Government grading and cool store, a great advantage to the outside dairy factories, whose butter thus avoids all risk of injury after grading. All produce is conveyed on board the New Zealand Shipping Company's ocean-going steamers (which anchor in Waitara roadstead) in specially-constructed and insulated bags.

Inglewood, situated on the railway-line, sixteen miles south-east of New Plymouth, is a flourishing little town of some 650 inhabitants, rapidly coming to the front.

The only other towns of importance are Eltham, population, 582; Opunake, population, 400; Manaia, population, 480; and Normanby, population, 400.

Roads and Railways.

The chief means of communication is the railway from Wellington, which traverses the district between Patea and New Plymouth—a distance of sixty-six miles. Trains run every day between New Plymouth and Palmerston North—164 miles—and on Tuesdays and Fridays there are through trains between New Plymouth and Wellington—252 miles. The Main North Road runs from New Plymouth, passing through the Towns of Waitara and Urenui; it is formed as a cart-road as far as Pukearuhe, a distance of thirty miles. From here a horse-track connects with the Mokau and Awakino Rivers, and from Awakino there is a track to Te Kuiti, in the Auckland District. About midway between New Plymouth and Waitara on the above road the Mountain road diverges and runs almost due south, and chiefly along the railway, for a distance of forty miles, connecting with the Main South Road at the Town of Hawera. This is at present the principal road in the district, tapping, as it does, large numbers of district roads, and passing through the Towns of Inglewood, Midhurst, Stratford, Eltham, and Normanby.

The Ohura Road branches from the Mountain Road at Stratford, and is formed as a dray road for a distance of thirty-five miles; it is being extended into the interior so as eventually to connect with Auckland, and will open up a large area of fertile country.

The Main South Road from New Plymouth follows the trend of the coast to the south, and was at one time the coach-road to Wellington. It passes through the Villages of Omata, Oakura, Okato, Rahotu, Otakeho, Manutahi South, and Kakaramea, and the Towns of Opunake, Manaia, Hawera, and Patea.

The Junction Road runs south-east from New Plymouth, and crosses the Mountain Road and railway at Inglewood. It is formed and metalled for nineteen

miles, and formed only for a further distance of thirty-two miles beyond this point, connecting with the Ohura Road at a distance of thirty-one miles from Stratford. This road crosses a number of district roads; hence its name.

The Opunake Road runs from Stratford to Opunake, twenty-six miles, skirting the southern base of Mount Egmont. It is formed and metalled for twelve miles from Stratford; the remainder is open for horse-traffic only.

The Eltham Road runs from Eltham to Opunake, twenty-five miles, connecting with the Opunake Road at Punehu, seven miles from Opunake. This is formed and metalled throughout.

The other main roads in course of construction are the Awakino Road, branching from the Main North Road at the Mimi; the Rawhitiroa Road, leaving the Mountain Road near Eltham; the Waitotara Valley Road, starting from the Main South Road at Waitotara Township; and the Otaraoa, Moki, and Okoke Roads.

Crown Lands available for Settlement.

	Acres.
Crown lands available for settlement	563,000
Native lands undealt with	392,460
Total	955,460

Of the above, about 150,000 acres are open valleys and hills in the north-east corner of the district; a good deal of it more or less pumice-land, but still suitable for grazing. From the rest may be subtracted perhaps 10,000 acres for area absorbed by rivers, gorges, &c., and there remain 795,460 acres of forest-land yet to be dealt with. Of this area perhaps 50,000 acres, made up of strips of flats and terraces, may be suitable for agriculture; while the balance—745,460 acres—will be good pastoral land.

It may be said, in conclusion, that there is every sign of genuine prosperity throughout the district, which has advanced rapidly during the last few years, and will no doubt continue to do so.

HAWKE'S BAY LAND DISTRICT.

E. C. Gold-Smith, Chief Surveyor.

The Land District of Hawke's Bay comprises that portion of the east coast of the North Island from Cape Turnagain, in latitude 40° 30′, northwards to Lottin Point, about thirty miles beyond the East Cape.

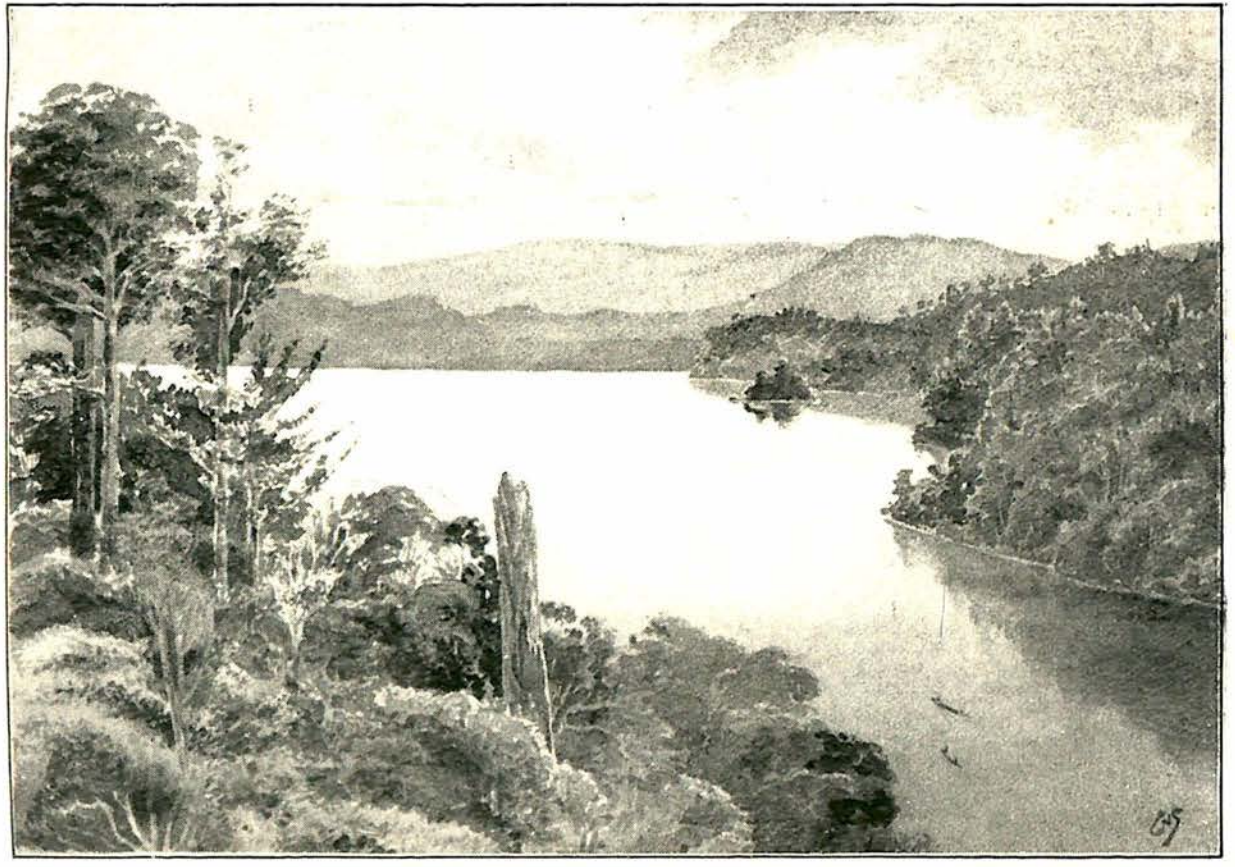
It has a seaboard of 300 miles, with an average depth from the coast of forty-five miles, and embraces an area of 6,063,000 acres. Its western limit is defined by the Ruahine, Kaweka, Ahimanawa, Raukumara, and other high ranges that form the watershed between the rivers flowing through it to the sea, and those that run to the west coast and the Bay of Plenty.

Physical Features.

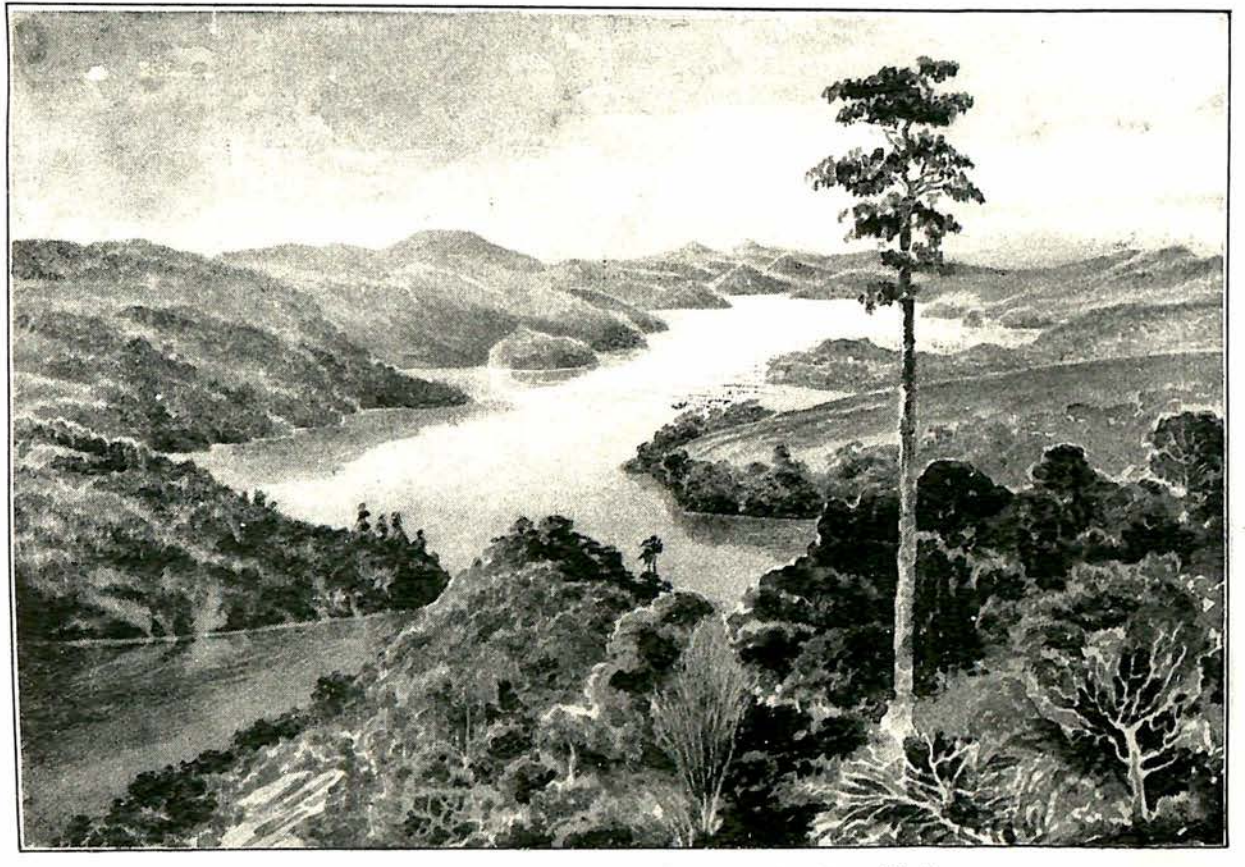
The Ruahine Range extends northwards for about sixty miles from the Manawatu Gorge as far as the valley of the Ngaruroro River. Its altitude varies from 3,000 ft. to 6,000 ft., and for a considerable distance its summit is snow-clad during the winter months.

The Kaweka, a shorter range, divided from the Ruahine by the Ngaruroro River, attains an altitude of 5,650 ft., is very rugged and steep, and a prominent feature in the landscape in winter, covered as it then is with snow.

From these two ranges, which fall very abruptly on the Hawke's Bay side, the land slopes gradually to the sea, forming in some parts fine rolling hills—the essence of a sheep-country—in others extensive plains, with comparatively little poor soil.



Waikare-Moana, looking N.E. from Te Ure-o-patae Island.



Waikare-Moana.—The Wairau Arm, looking N.E. from Wai-o-paoa.

From Sketch by S. Percy Smith.

Northwards from the Kaweka there is a series of forest-clad ranges of varying height, stretching away in the direction of the East Cape. Hikurangi, the highest point, is a bold peak with an elevation of 5,606 ft., rising so abruptly on all sides that the ascent can be made only at one point, and that with difficulty.

The only lake in the district of any extent is Waikaremoana, so famous for its magnificent scenery. It lies about thirty-five miles inland of the Wairoa (Clyde), and is eleven miles in length, with a breadth at the widest part of about eight miles. Nestled among precipitous mountain-ranges, wooded to the water's edge, with numerous bays and inlets, it has a natural beauty hardly to be surpassed.

From Wairoa there is a formed road to within four miles of the lake, and for the rest of the way a good riding-track.

The principal plains are: (1.) The Ruataniwha, some fifty miles south of Napier. This is 120 square miles in extent, is for the most part occupied as sheep-runs, and carries a large quantity of stock. (2.) The Heretaunga Plain, with an area of ninety square miles, lying immediately to the south of Napier. This is rich alluvial land; a large portion is thickly settled, the remainder used for grazing and agriculture. The only other plain of any extent is at Poverty Bay. It has an area of sixty-five square miles, is very fertile, well cultivated, and bears a large population.

The land district is well watered throughout by numerous rivers and streams, but none are navigable except the Wairoa and Turanganui, and these only for vessels of light draught. They are both tidal, and serve as ports to the Towns of Wairoa (Clyde) and Gisborne.

Communication.

The chief outlets from Napier are three in number. First the Napier-Palmerston Railway, which traverses the centre of the southern half of the district for its whole length of 100 miles, and may be called the main artery of communication. Parallel to it throughout runs an excellent gravelled road, which was made before the construction of the railway. On either side there are numerous branch roads, which act as feeders, making a very complete system of internal transit. Another main road runs in a westerly direction to Kuripapanga, distant forty-five miles, a favourite resort in the summer time, removed as it is from the heat of the country near the coast. A coach runs thither twice a week, and on thence to Inland Patea, where the Napier Road meets the roads to Hunterville, Tokaanu, and the Wanganui River.

The part of the district served by these two main lines—viz., that between Napier and Woodville—contains the greater portion of the population, and from the extent of arable land within it is likely in the future to be very thickly peopled. Notwithstanding that so much of the Native land in this part is unoccupied, and in its natural state, there are nearly a million of acres of land in sown grasses, carrying 2,200,000 sheep and 63,277 cattle, and the population, inclusive of towns and villages, is 35,022 persons.

The only main road northwards from Napier is the coach route to Taupo, which, soon after leaving the fertile Petane Valley, begins to traverse poor country, and twenty-five miles out enters the light pumice soil.

From Napier to the Wairoa the journey must be done on horseback, as there is a break of thirty-five miles between Tongoio and Mohaka unfit for wheeled traffic; but this is being gradually remedied. As a natural consequence, the traffic between these two places has to be done by small steamers.

From the Wairoa a main road runs northward, through the Village of Tiniroto and on to Gisborne, a distance of seventy-five miles. For a considerable distance it runs through hilly country, and, as it has not been gravelled, wheeled traffic is suspended during the winter months; but a coach runs weekly for nine or ten months out of the year.

Between Gisborne and Opotiki, in the Bay of Plenty, communication is not good. The road, which is 120 miles in length, has been formed only to the edge of the Motu Forest, a distance of fifty miles. In the neighbourhood of the forest a large area of Crown lands has been taken up and settled in the last two or three years. The rest of the journey must be done on horseback.

In the country north of Gisborne, formed roads for wheeled traffic are few in number, and not continuous; but small steamers trade regularly along the coast, calling in at Waipiro, Tuparoa, and Awanui, Kawakawa, and other small bays.

Pastoral Industries.

The Hawke's Bay District is pre-eminently a sheep-grazing country. The extent of land in sown grasses in the provincial district, according to the latest returns, was 1,673,883 acres, and this notwithstanding that a considerable amount is unused, or forest country—and therefore unproductive—while other parts are made use of for tillage only. In April, 1896, there were in the provincial district 3,241,477 sheep; and in November, 1896, 84,400 cattle and 16,849 horses. The value of the wool exported during the twelve months ending the 31st March, 1897, was considerably over a million pounds sterling, that shipped from Napier alone representing £801,928.

Freezing-works have been established at Woodville, Waipukurau, Tomoana, Napier, and Gisborne, and the export of frozen meat from the port of Napier alone during the same period was of a value of £112,916, while further shipments were made from Gisborne. This industry gives employment to a large number of persons, both directly to those engaged in breeding, shearing, freezing, and shipping, and indirectly to those who labour at bushfelling, grass-seed sowing, fencing, and otherwise opening up new country. Nor must the cutting of the immense amount of firewood consumed at the works be forgotten. All this benefits the settler with limited means, by providing him with funds to improve his holding, and to this is due, in a great measure, the general prosperity.

Agricultural Pursuits.

Agriculture is not carried on to the extent it might be with so much land suitable for root- and grain-crops. No doubt this is due to the profits made in sheep-farming. It is chiefly confined to the Heretaunga Plains and the flat lands near Gisborne. The soil is favourable to root-crops; potatoes range from 12 to 15 tons to the acre, and in some instances exceed this amount. Only a moderate quantity of grain is grown; barley, for which the soil seems well adapted, returning from 20 to 60 bushels of good sample to the acre.

Dairying.

Settlers are now turning their attention to dairying, and lately factories have been established in the bush districts at Norsewood, Ormondville, Maharahara, and Woodville, whilst several others are in contemplation. At the last-mentioned town a cheese-factory has been in existence for some years, and turns out an excellent article much sought after in other parts of the colony.

Timber Industry.

The timber industry is considerable, numerous saw-mills being in full work in different parts of the district. In the forest between Takapau and Woodville there are twelve, with an estimated yearly output of 10,000,000ft. This tract of forest is the one most used for milling purposes, and will yield a plentiful supply for a long time to come, notwithstanding that for years past a large amount of totara timber has been taken out of it to send to other parts of the colony. Further north there is no totara to speak of, though rimu, white-pine, and other milling timbers are to be found scattered throughout the forests, and in the Poverty Bay District puriri is found in some quantity.

Other Industries.

Other industries, such as fellmongeries, soap-works, boot-, coach-, and sash-and-door factories, &c., are established in the principal towns.

Climate.

The climate is generally of a mild character, and, though hot along the coast-lands in the height of summer, it is, owing to the dryness of the atmosphere, not so

relaxing as in parts of the island farther north. The rainfall is light, excepting in the bush districts and high inland country.

Napier itself is recommended by many medical men as a resort for invalids suffering from pulmonary complaints, chiefly on account of the mildness of its winter season.

Towns.

Napier is pleasantly situated on the peninsula known as Scinde Island, which is joined to the mainland by a narrow shingle-bank of several miles in length. It is a busy town, with a population of 9,300. The business part is on the flat land at the foot of the group of hills that take up the greater part of the peninsula. These hills, formerly barren and waste, are now occupied by numerous private residences, and the very general tree-planting has given the upper town a distinctive and pleasing character. There is an excellent water-supply, derived wholly from artesian wells of large size, and pumped by machinery to reservoirs on the tops of the hills. The shipping trade, as the large exports show, is especially active during the wool and frozen-meat season. It is at present carried on at Port Ahuriri, about a mile from the town; but will, before long, in a large measure be transferred to the fine break-water which is now advancing towards completion.

Gisborne, the trade-centre and port of what is known as the Poverty Bay District, is a prosperous town of about 2,300 inhabitants, rapidly increasing in size and importance, as the large quantity of unimproved land in the Cook County is fast becoming settled and made productive. There are nearly 700,000 sheep now in Cook County.

Clyde, the county town and port of the Wairoa County, is picturesquely situated on the Wairoa River, about three miles from the mouth. The river is navigable for small craft as far as the village of Frasertown, twelve miles further up.

With a few exceptions, the towns and villages to the south of Napier are all situated on the line of railway running from that city to Palmerston North. The principal are: Hastings, a rising town of 3,190 inhabitants, Waipawa, Waipukurau, Dannevirke, and finally Woodville, about three miles from the Manawatu Gorge, and distant ninety-eight miles from Napier. It is at this end of the district that the Crown has, in the last few years, successfully planted settlement, and, in place of the continuous forest known as the Seventy-mile Bush of earlier days, there are now prosperous townships, with various thriving industries established.

Crown Lands.

The land held by tenants of the Crown under the various systems of tenure amounts to about 450,000 acres, and there remains about 414,000 acres not yet dealt with in any manner.

The latter is, for the most part, suitable for pastoral purposes only, any fit for agriculture lying in small, isolated spots, widely scattered, and such as could not be selected independently of the surrounding inferior land. Nearly the whole is broken forest country, fitted more for sheep than cattle, and having an average carrying-capacity, when cleared, of about one sheep to the acre, though the best of it might possibly graze from two to three. The land is chiefly in the Hangaroa, Koranga, Mangaroro, Norsewood, and Motu Districts, and the back-country of the Waiapu County.

About 45,000 acres are now open for selection. Of these, 5,000 are in the Nuhaka North Survey District, not many miles from the Mahia Peninsula. This is hilly forest country, with light soil, but well suited for grazing purposes. In the Waiau Survey District, near Waikaremoana, there are over 8,000 acres, also hilly country, of limestone formation. In the Motu District, between Gisborne and Opotiki, there are about 16,000 acres open, and in the Mata and Hikurangi Survey Districts, situated from fifteen to twenty miles inland from Waipiro, there are 13,700 acres of rough forest limestone country, at the present time not easy to get at; but a road to the block will shortly be put in hand. There are also 1,000 acres open in the Pohui District, about twenty-eight miles north of Napier.

Native Lands.

Of the Native lands in this district, a very considerable portion has been leased to Europeans, but there still remains in the hands of the Maoris a valuable estate, comprising both agricultural and pastoral country, and including some 800,000 acres of excellent land. This land lies for the most part in the Waiapu County, towards the East Cape.

THE WELLINGTON LAND DISTRICT.

J. W. A. MARCHANT, Chief Surveyor.

The Wellington Land District is bounded on the north by the Districts of Auckland and Hawke's Bay, on the west by that of Taranaki, on the east by the sea, and on the south and south-west by Cook Strait. The area contained within these limits is about 6,000,000 acres. It lies between the parallels of 39° and 41° 30′ south latitude; its greatest length north and south is about 180 miles, and its mean width east and west about sixty miles.

General Physical Features.

The district is divided into two well-defined parts by a mountain range, which forms part of the backbone of the North Island. At its northern end this range—there known by the name of Ruahine, and averaging a height of about 4,000 ft.—divides Wellington from Hawke's Bay; but after passing the point where it is intersected by the Manawatu River, the range takes the name of Tararua for many miles, until, at about forty miles from the termination on the shores of Cook Strait, it divides into two main ranges, known respectively under the general names of Rimutaka and Tararua, both ranges averaging from 2,500 ft. to 3,500 ft. in height, the highest point being Mitre Peak, 5,154 ft. Parallel to the main range, and divided from it by the Wairarapa Plain and the undulating country to the north, is a series of ranges at a few miles inland from the East Coast, known as the Puketoi, Taipo, Maungaraki, and Haurangi Ranges. Lying on the northern border of the district are the Kaimanawa Ranges, offshoots from the Ruahine. They are for the most part open and grass-covered, rising to a mean height of about 4,500 ft. Westward from the latter mountains, and divided from them by a deep, broad valley, in which flow the Waikato and Wanganui Rivers, is the volcanic chain of mountains containing Ruapehu, 9,008 ft., and Ngauruhoe, an active volcano, 7,515 ft. high. The long sweeping curve of Cook Strait, forming the south-western limit of the district, is bordered, from the Patea River to within thirty miles of Wellington, by a comparatively level and undulating country, now nearly all under cultivation, having an average width of about fifteen miles. This is one of the finest parts of the colony, and is celebrated for its stock-raising capabilities. It was originally in a great measure open, though the southern part, where the plain is narrowed in between the sea and the Tararua Range, has a good deal of forest on it, now fast disappearing under the axe of the settler.

Inland of this coastal plain, at varying distances from the sea, the country gradually rises to a mean height of about 1,500 ft. to 1,800 ft., and becomes a good deal broken in character. It was originally forest-clad almost throughout. It is much cut up by rivers and streams flowing from the interior to the sea, of which the principal, commencing from the north, are these: The Waitotara, the Wanganui, the Wangaehu, the Rangitikei, the Oroua, the Pohangina, and the Manawatu, which last, after leaving the gorge in the Ruahine Ranges, runs through level land to its mouth in Cook Strait. This broken country, being everywhere composed of papa, or marly formation, which takes grass excellently, promises in the near future to be a large sheep-carrying district.

At about fifteen miles south of the volcanic peaks of Ruapehu Mountain the papa country terminates in a fairly well-marked escarpment, giving place to a more level and undulating country formed of volcanic matter, the greater portion of which is forest-clad, though on the south-east, east, and west sides of that mountain there are open grassy plains, of no great fertility, but yet suited to pastoral pursuits.

To the eastward of the main range formed by the Rimutaka and Tararua Ranges is the great depression known at its southern end as the Wairarapa Plain, which gradually rises northwards from the lake of that name into wooded, somewhat broken country, of no great height, at a distance of some forty-five miles from the sea. From here the country falls again slightly to the Upper Manawatu River, the depression in this part being marked by the extensive flats in the neighbourhood of Pahiatua, and by the shallow valleys of the Mangahao, Mangatainoko, and Tiraumea Rivers and their branches. For thirty miles from the sea this great valley is mostly open, with patches of forest here and there, but becomes more plentifully wooded at the base of the Rimutaka and Tararua Ranges. The quality of the soil varies from light and stony, on the Wairarapa Plains proper, to rich papa country, as the northern end is approached. The southern end of this country is watered by the Ruamahanga River and its tributaries. Generally the district is a pastoral one, though agriculture is also pursued successfully. The neighbourhood of the Puketoi Ranges is in many places composed of limestone, and promises in the future to become a very rich pastoral district, such as will carry a considerable population. In the forks formed by the Tararua and Rimutaka Ranges the Hutt River takes its rise, and runs in a southerly direction through an undulating or level country, finally falling into Port Nicholson. The valley contains some very fine land, generally held in small holdings.

Plains.

The two most important of these have already been mentioned. On the eastern side of the main range the Wairarapa extends northward from the lake of that name for about forty-seven miles, with an average width of about nine miles. In some parts, especially on the flats along the Ruamahanga River, the soil is alluvial and rich; in others, though stony and unfit for cultivation, it is nevertheless grassed, and carries stock well in the winter and rainy seasons. The plain is watered by the Waiohine, Waingawa, and Ruamahanga Rivers, and contains altogether about 200,000 acres, much of which is good agricultural land. On the other side of the district, west of the Tararua and Ruahine Ranges, there is a large block of land so nearly level that it may be called a plain, extending from Paikakariki (thirty miles from Wellington) to Marton (a few miles north of the Rangitikei River), and contains about half a million acres. Starting as a narrow strip between the hills and the sea, the plain widens out by degrees until at Fielding it is at least twenty miles in breadth. *Along* the beach runs a fringe of sandhills, but behind this is to be found some of the best farming and grazing land in the colony. There are two plains inland—Murimotu and Waimarino—both lying some 2,200 ft. above sea-level, in the neighbourhood of Mount Ruapehu, the former to the south and the latter to the north-west of the mountain. The soil is covered with a coarse native tussock, and, though capable of carrying stock, is of a light porous nature, and cannot be classed as agricultural land.

Rivers.

First among these is the Wanganui—"the Rhine of New Zealand"—with a length of over 110 miles from its source, near Mount Tongariro, to its outlet. The Rangitikei, the next in size, rises in the Ruahine Mountains, and flows through the Awarua country, where it is joined by the Hautapu and other large tributaries. After a course of over a hundred miles it reaches the sea some little distance below the Township of Bulls, on the West Coast. The Manawatu is third in importance. Rising in the Ruahine Range, it flows through the picturesque Manawatu Gorge, joining the sea at the port of Foxton. Lesser rivers on the West Coast are the Waitotara (north of Wanganui), the Wangaehu (which takes its rise in Mount Ruapehu, and from its source to its mouth is so strongly impregnated with sulphur that fish cannot live in it), the Turakina, and the Otaki. The only other rivers of any size are the Hutt (Heretaunga), emptying itself into the Wellington Harbour, the Ruamahanga, flowing through the Wairarapa Valley and lakes into Palliser Bay, and on the East Coast the Pahaoa, Aohanga, and Akitio.

Lakes.

The only lake of any size in the Wellington District is the Wairarapa, lying between the Rimutaka and Haurangi Ranges, towards the southern end of the Wairarapa Valley. It is about twelve miles long and four broad, and is connected by the Ruamahanga River with Onoke, a small lake separated from Palliser Bay by a narrow shingle spit only. A passage through the spit is opened from time to time when the lake rises above its natural level and overflows the low-lying flats along its margin. Water-fowl of every kind—among them numbers of black swans—are to be found round about these lakes.

Scenery.

The views obtained from the railway-line in the ascent and descent of the Rimutaka Range are among the best in the neighbourhood of Wellington, and the road through the Forty-mile Bush was long considered one of the most beautiful drives in the North Island; but much of its pristine beauty has been destroyed by the felling of the bush consequent on the increase of settlement. The same may be said of the Manawatu Gorge, famed in the old coaching days for its lovely scenery, but now sadly marred by the construction of the railway-line. The most beautiful drive now left is through the Awarua Bush, from Ohingaiti to Moawhango. From this road, as it winds round the spurs, most charming glimpses are obtained of the Rangitikei River and the blue hills beyond, and at other points the traveller looks up deep ravines where the graceful fern-tree stands out in bright relief against the dark green of the native bush. Another road from Pipiriki, on the Wanganui River, to the Murimotu Plain, traverses one of the most magnificent forests in the North Island. Here the bushman's axe has felled only the timber standing on the road-line, and the track runs beneath the shade of the largest and stateliest maire and rimu known. Beautiful as these drives are, the scenery on the Wanganui River is still more lovely. A few miles below Taumaranui the river enters a series of gorges, shut in by high precipitous cliffs. Sometimes the canoe glides slowly through quiet reaches, sometimes shoots rapids which make the traveller hold his breath till they are passed, and then again traverses places where the water is ever in turmoil, boiling and eddying in whirlpools, taxing the energies of the most skilful Native steersman, and testing the nerve of the most courageous tourist. These experiences, with the views obtained of the banks, densely wooded even where the papa rock rises almost straight from the water's edge, make the eighty miles journey from Taumaranui to Pipiriki an event not easily effaced from the memory. Between Pipiriki and Wanganui an excellent steamer is now running, so that the beauties of the lower part of the river may be seen by all without trouble or discomfort.

Forests.

The Wellington District is essentially a forest country, for out of the 6,000,000 acres contained within its borders 3,400,000 are still under bush. By far the largest forest is the Waimarino, having an area of at least three-quarter million acres, a large portion of it being nearly level land, containing magnificent timber, principally totara, maire, matai, rimu, and other pines. This forest is as yet hardly touched, though one sawmill has lately been started at Raetihi to cut timber for the settlers now making their homes in the neighbourhood. The distance from the settled districts or any port will render the timber in this part useless as a marketable commodity until the country is opened up by the proposed Auckland Main Trunk Railway.

The next in size is the Rangitikei-Hautapu Forest, containing an area of about 400,000 acres, a considerable portion in the Awarua Block being first-class milling timber, which will be available as soon as the extension of the Hunterville Railway-line taps it. Between this and the Waimarino Forest there is a large extent of bush land, drained by the Turakina, Mangamahu, and Wangaehu Rivers, extending up to the Wanganui River, and containing about 350,000 acres. Very little of this, from its inaccessibility, will be utilised for saw-milling purposes, but a great deal of it, together with a further block of 230,000 acres on the west side of the Wanganui River, will be cleared by the settlers and sown down with grass. A further

block of about 100,000 acres of forest-land lies in the Pohangina Valley and on the slopes of the Ruahine Range. A large portion of this has been taken up and is now being settled.

The forest-land on the West Coast extends from Pukerua to the Manawatu Gorge, on the west side of the Tararua Range, and contains an area of about 380,000 acres, the bulk of it being fit only for turning into pasture. The most available part of it, alongside the Wellington–Manawatu Railway, is being extensively cut into by sawmillers at Levin and other places on the line.

After this in size is the forest commonly known as the Forty-mile Bush, containing 260,000 acres. It lies immediately north of Masterton, and is tapped by the Wairarapa Railway and the extension to Woodville, now nearly completed. It is at present being quickly denuded of timber by the sawmills established at Eketahuna and Pahiatua, and by the increasing number of settlers. A tract of fully 100,000 acres lying to the east of the Puketoi Range cannot be utilised for milling purposes, as it is not tapped by any branch railway-line, and its distance from the main line would render the business unprofitable. Nor are there any suitable ports along the coast where timber could be shipped.

The other forests are, one near Lake Taupo, the Wairarapa–Tararua Forest on the east side of the Tararua Range, and its continuation on both sides of the Rimutaka Range, and the Haurangi Forest on the east side of the Wairarapa Lake. These consist for the most part of birch-covered hills, and cannot be considered as valuable for milling purposes.

Soil.

It may be said that the Wellington Land District contains within its borders a greater quantity of good land than any other in the North Island, very little, except the mountain-tops, being unfitted for use, while some of it is of very superior quality, suited for the growth of the productions of every temperate climate. As much of it is still forest-clad, settlers must look forward to having to make their farms by felling and burning the bush before grass can be sown, and, as it takes from ten to fifteen years before the plough can be used in bush-land, grazing, for which the climate and soil is admirably adapted, will be the principal industry for some time to come. It is generally calculated that the cost of felling and burning ordinary bush varies from 25s. to 35s. an acre. To this must be added about 20s. for seed and fencing. It is no uncommon thing for a return to be received at from twelve to eighteen months after felling. The usual practice is to put sheep on to the new lands soon after the grass has obtained a good hold. The process of improving the lands by the gradual "logging up" and burning of the fallen tree-trunks is a long one, but it pays in the end, for in this way fine pasture-lands are obtained on the hills, and agricultural lands on the flats.

Climate.

The climate of Wellington District is healthy and mild, the mean annual temperature (in the city) being 55·4, whilst the mean rainfall is 57·55 in. per annum. The rainfall differs, however, according to locality. Inland and near the ranges it is much greater. The top of Ruapehu Mountain is covered with perpetual snow, which lies also on the tops of Kaimanawa, Ruahine, and Tararua in the winter. Frosts are heavy in the interior.

Harbours and Ports.

The coasts of Wellington are not so well supplied in this respect as are some other parts of the colony; but what is lost in number is made up in a great measure by the excellence of the chief haven—Port Nicholson—which, from the position it occupies, at the meeting-point, as it were, of the coastal traffic of both Islands, and from its sheltered position and depth of water, may be considered one of the most convenient harbours in the world. The Wanganui River, which has been considerably improved by artificial means, is the second port in the district, and has a considerable trade carried on by coastal steamers. Patea and Manawatu Rivers are also used by coastal steamers, whilst several other places along the shore afford shelter and stopping-places, according to the direction of the wind. The extension of railways

along both coasts has, in a large measure, done away with the inconveniences arising from want of harbours.

Towns.

The capital of the colony—Wellington—is situated in the south-west angle of Port Nicholson, on Lambton Harbour. The wharfage accommodation here is second to none in the colony, and the wharves present always a busy scene of life with the numerous steamers and sailing-vessels continuously loading or discharging. As many as four ocean-going steamers are not unfrequently seen alongside, loading with wool, frozen meat, and other products, for conveyance to Europe. The port possesses a patent slip at Evans' Bay, within a short distance of the city. Founded in 1840 by the New Zealand Company, the city occupies the flats skirting the original shore-line, long since obliterated by the reclamation of the foreshore, which is now mostly covered with fine buildings. Rising close behind the old shore-line is a range of hills, the lower parts of which are all built over. The population of the city at the present time is about 38,600. Being the seat of Government, it contains the residence of the Governor and the head-quarters of the Government departments, which are placed in what is said to be the largest wooden building in the Southern Hemisphere. There are several noticeable public buildings, amongst which must be mentioned the Parliamentary Buildings, containing a valuable library, General Post Office, Government Life Insurance Offices, Public Library, School of Art, and Harbour Board Offices. The Colonial Museum, under the management of Sir James Hector, and the Botanical Gardens, are also worthy of notice. The city is lighted by electricity, and its streets are well kept and clean, whilst an excellent supply of water is obtained from the Wainui-o-mata River, on the other side of the harbour. The principal industries are represented by iron- and brass-foundries, factories, sawmills, soap-and-candle works, boot-factories, aërated water, meat-freezing works, coach-building, rope-and-twine works, sash-and-door factories, brick-, tile-, and pottery-works, besides a match-factory and innumerable other smaller works of various kinds. The city is increasing with rapid strides; its excellent position, together with the fine back-country, places it in the front rank of New Zealand towns. Its principal suburbs are Onslow, Melrose, and Karori, each containing from 1,000 to 2,000 inhabitants.

The Township of Petone is situated near the mouth of the Hutt River, seven miles from Wellington, on the railway-line. It had in April, 1896, a population of 2,685, and is a rising township, containing the Government Railway Workshops, a woollen factory, and a meat-freezing establishment. The Lower Hutt, almost immediately adjoining, has also a large population, and some well-built residences with beautiful gardens. The Upper Hutt, situated at the head of the valley, has many small farms, owned by some of the very early settlers. The railway here starts the ascent of the Rimutaka Range.

Featherston, situated at the foot of the Wairarapa Valley, fifty-one miles by rail from Wellington, is a small township, with butter and cheese-factories in the neighbourhood. Roads lead from it to Martinborough and the East Coast, and also down the Wairarapa Valley to Palliser Bay.

Greytown North is situated three miles off the main line of railway, and near the middle of the Wairarapa Valley, fifty-three miles from Wellington. The chief industries are saw-milling and coachbuilding. The population in April, 1896, was 1,129.

A few miles further north is the Town of Carterton, where are to be found timber-mills, cheese-factories, &c., and a population of 1,291 persons. There is some splendid farming land in this locality on the banks of the Ruamahanga River.

Masterton is situated at the head of the Wairarapa Valley, on the Wellington–Eketahuna Railway, sixty-seven miles from the capital. It is the centre of an agricultural and pastoral country, and had in April, 1896, a population of 3,493. It is lit by gas, and has several industries, such as fellmongery, rope-making, flax-mills, coach-factory, &c., and, in addition, has some excellent fish-breeding ponds, from which many of the rivers in the colony have been supplied with trout. An important coach-road leads from here through a fine pastoral district to Tinui, and on to Castlepoint on the East Coast, where a large quantity of wool is annually shipped to Wellington for export.

North of Masterton is the Opaki Plain, and beyond is the entrance of the Forty-mile Bush, which is now fast becoming a thriving pastoral, agricultural, and dairying district. Butter-factories have been established at Hastwell and Mauriceville, where a large number of Scandinavians are settled, forming hard-working and thriving communities.

Eketahuna is, by rail and road, ninety-four miles from Wellington. From there a main road leads to Alfredton, and up the Tiraumea Valley. The road is in process of extension through the East Puketoi country, now being opened up in farm-homestead settlements, and will eventually lead to Weber and Dannevirke, on the Napier Railway-line.

Pahiatua, a rising township about fifteen miles beyond Eketahuna, has a resident population of 1,200. It is the county and market-town of a large and improving district, and will probably also become the centre of a large dairying industry. Coaches run daily from Eketahuna through Pahiatua, and eleven miles farther on to Woodville, where they connect with the main railway-line. Several branch roads run from Pahiatua into the adjoining country, the principal one leading to Makuri through a beautifully-wooded gorge. From there another branch road passes over the Makuri saddle into the East Puketoi country.

On the West Coast, Pahautanui, at the head of the Porirua Harbour, is the centre of a small agricultural community of early settlers, the old coach-road to Paikakariki running through it; and there is a branch-road leading over to Hayward's in the Hutt Valley. Paikakariki, twenty-seven miles from Wellington, may be considered the commencing-point of the West Coast settlements, which are springing up in every available valley along the coast. At Otaki, forty-seven miles from Wellington, by rail and road, there is a small township, and a large Native settlement. At Manukau, Levin, and Shannon, small townships have arisen since the Manawatu Railway Company opened up the land round about, much of it being rich farming and grazing country. Between Shannon and the Manawatu River there is a large raupo or flax swamp, named Makurarua, containing at least 15,000 acres of fine alluvial soil, which is being gradually drained by the company, and will probably at some future period become grazing-land.

Foxton, a township at the mouth of the Manawatu River, is a small shipping port, containing about 1,100 inhabitants. It is connected with Palmerston by a branch railway, and is the outlet for a large area of good agricultural land.

Palmerston North is an inland town at the junction of the Wellington–New Plymouth and the Palmerston-Napier Railways, situated on a fine plain in the midst of a most excellent farming district at a point eighty-eight miles from Wellington, and 110 miles from Napier. Its population in April, 1896, was upwards of 5,900. It is lit with gas, and has a good water-supply. A fine bridge across the Manawatu River connects it with the Fitzherbert Block, a tract of rich agricultural land. Nine miles from Palmerston is the Township of Ashurst, at the mouth of the Pohangina Valley, up which settlement has now extended for a distance of twenty-two miles. Several large farm-homestead association blocks have been selected up this valley.

Feilding, 104 miles from Wellington by rail, with a population at last census of 2,045, is becoming one of the most important towns on the West Coast, as it is the centre of a very fine locality, and the outlet for a large tract of inland country, the forest on which is fast being felled. A coach-road connects it with Birmingham and Pemberton, about thirty-two miles distant. On the seaward side for a distance of twenty miles there is also much good agricultural land, extending on the north-west to the Rangitikei River, and including the Township of Halcombe. There are several dairy factories established in the neighbourhood.

Marton, 123 miles from Wellington by rail, with a population of 1,151, one of the earliest of the West Coast settlements, is also the centre of an agricultural country. The Township of Bulls, on the north side of the Rangitikei River, lies between Marton and the coast. From Marton Junction the southern part of the North Island Main Trunk Railway extends up the Rangitikei Valley to Hunterville, a good-sized township in the centre of a grazing district, and from thence as far as Mangaonoho, twenty-three miles from Marton; from there a coach-road has been made to Ohingaiti, beyond the Makohine, where a large viaduct has to be built before the railway-

line can be continued. From Ohingaiti the coach-road has been made to Turangarere, and from thence to Tokaanu, on Lake Taupo, in the Auckland District.

Wanganui, situated near the mouth of the river of that name, is the oldest town after Wellington, from which it is 151 miles by rail—the distance by sea being only a hundred and twenty miles. It is the centre of an excellent farming district, and has a considerable trade, and several manufactories. Near the mouth of the river are freezing-works, the meat from which is conveyed by lighters to the large English steamers lying off the mouth of the river. The town is lit with gas, and has a good water-supply. Not far from it are some extensive railway workshops. Altogether it is a thriving place, with a population in April, 1896, of about 6,000. The Wanganui River is navigable for a light-draught steamer up to Pipiriki, a distance of fifty-six miles, and for canoes a further distance of eighty miles to Taumaranui. A branch road extends from Pipiriki through the Waimarino Forest to Ohakune, and on to Karioi on the Murimotu Plains, thence by way of Turangarere and Moawhango to Napier.

Crown or Native Lands available for Future Settlement.

On the east side of the Wairarapa Lake there are 43,000 acres, known as the Dry River-Haurangi Block, but most of this land can be considered only third-class pastoral country. It has not been opened for sale yet, owing to the difficulty of getting proper access into it.

White Rock Block.—An area of 10,700 acres of second-class pastoral land in the White Rock Block, situated in South Wairarapa, lately withdrawn from sale, will shortly be more fully explored, &c., with the object of re-offering when a new scheme of subdivision has been approved by the Land Board.

Kaitangata, Te Mara, and Kaiparoro Blocks.—These blocks, containing about 58,000 acres of second-class pastoral country, were opened for sale in September, 1893. The lower portions have been taken up and are being settled on, but the balance of the blocks, to the extent of about 35,000 acres, has lately been withdrawn from sale, with the object of having this area more fully explored, back lines laid off, road access provided for, &c. The remaining unsold portions of these blocks will be re-offered when a new scheme of subdivision has been approved by the Land Board.

There is a further area of 155,000 acres in the Tararua Mountains, some of the valleys in which may eventually be settled, but the difficulty of getting roads into them is too great to be undertaken at present.

North-east Puketoi Block.—About 3,000 acres of North-east Puketoi Block will shortly be re-offered as second-class land. This block, generally speaking, lies between the Coonoor Special Settlement and sold lands on the east and the North Puketoi Block on the west, the main part being the slopes of the Waewaepa Ranges, consisting chiefly of hilly and undulating lands.

Dannevirke Centennial Block.—Thirty-two sections, of an area of 6,400 acres, have been withdrawn from sale in this block, as it is intended to re-offer them shortly, grouped into larger and more suitable holdings. It has been found that this block is not suitable for 200-acre selections.

Rangiwaea Block.—This block consists of about 10,800 acres near the end of the formed portion of Hale's Track, lying north-west of Ruanui Station, between the Turakina and the Wangaehu Rivers. This country, although hilly, is believed to be fair country for settlement, and is being subdivided into sections of from 320 acres and upwards.

Tauakira Block.—Situated near Athens, on the Wanganui River; about 26,700 acres. This consists chiefly of country suitable for second-class pastoral occupation, in areas of from, say, 1,000 acres and upwards.

Mangapapa Block.—This block is situated on the east side of the Waitotara River, and contains land suitable for pastoral purposes. The area is about 5,800 acres.

Town Land.—Further sections in Raetihi, Ohakune, and Makuri Townships will probably be opened for sale at Wanganui and Pahiatua on dates due notice of which will be given in the local papers.

About 20,000 acres, known as the Retaruke Block, on the Wanganui River. It is proposed to open this under the small grazing-run system during next summer.

Forfeited Farm-homestead Sections.—A large number of farm-homestead sections which have reverted to the Crown in the different Association Blocks in the Wairarapa North and South, Rangitikei, Wanganui, and other counties, are now being prepared for sale, and will be re-offered at early dates under the optional systems of the Land Act.

Due notice of these dates will be given in local papers, and sale lithos, with full particulars, will be published.

Improved-Farm Settlement Lands.

All the available land suitable for holding under the improved-farm conditions has now been allotted, but if any of the sections now held under this system should be forfeited, they will probably be ballotted for amongst applicants in the district who are known to be of good character and likely to make good settlers. If further blocks of suitable land for this system are found, they will be cut up and opened on the same conditions.

Lands Open and Available for Ordinary Selection.

Awarua Block.—Out of the Awarua Block, lying north of Ohingaiti, several blocks, containing over 140,000 acres, have lately been purchased from the Natives by the Crown. A great deal of this land is of first-class quality, though other parts will be treated as second-class land only—not that the soil is inferior, but because the land is too broken to be worked otherwise than as pastoral country in good-sized holdings. Several blocks have been surveyed; one of 15,000 acres west of Mangaweka, or Three-Log-Whare Township, was opened for sale in 1895, and subsequently another of 7,500 acres, between the Hautapu and Rangitikei Rivers. A further sale of quarter-acre sections in the Mangaweka Township has taken place, and the Taihape Township will be subdivided into town or suburban lots, of which some will be offered for sale. A block of 12,500 acres lying south-east of Moawhango was opened for application, and this has all been taken up. Further purchases in the Awarua Block, to the extent of about 97,000 acres, have been made, the surveys are being put in hand, and the bulk of the country will probably be opened for selection during the next twelve months.

North of the Kawatau, on the east side of the Rangitikei, a block of 17,173 acres of second-class pastoral country was opened for selection in February, 8,800 acres of which are still open for sale, and a further area will be roaded and prepared for sale during the summer.

Waitotara.—The Te Ngaue Block, 1,546 acres of second-class pastoral land, is now open for selection.

Waimarino.—Three blocks, containing about 10,000 acres, have had road-lines laid out through them, and are now open for application. A further block of about 46,550 acres, on the Retaruke, Oio, and Kaitieke Rivers, has had roads surveyed through it, and is now open for selection. There is an additional block of 27,000 acres, which is being surveyed, and will be offered as grazing-runs. 32,000 acres at the head of the Retaruke and Makino Streams have also been roaded. The rest of the Waimarino country, containing about 250,000 acres, is more or less broken, and will probably be opened as second-class pastoral country or small grazing-runs, to enable it to be taken up in larger sections.

A large number of Forfeited Farm-homestead Sections are now open for selection in the following blocks: Gladstone, Wanganui United East, Hunterville Nos. 1, 2, and 3, Sommerville, Palmerston North Knights of Labour, Marton Nos. 1 and 2, Pohangina and Umutoi, Delaware, Onslow, Pahiatua Nos. 1, 2, and 4, Masterton Reform, Christchurch, Woodville, Mekalickstone, and Waiwera.

Tongariro, Rangipopo, and Kaimanawa Blocks.—105,000 acres have been acquired by the Crown, but none of it is likely to be taken up for settlement for a long time to come

"Crown Land Guides" and sale lithographs, giving full particulars of lands open for selection in this Land District, will be forwarded to any one on application to the Commissioner of Crown Lands, Wellington.

Native Lands.

Townships are now surveyed at Pipiriki and Tokaanu, sections in which will be opened for leasing under "The Native Townships Act, 1895."

The allocation of the Crown's purchases in the Raetihi, Tauakira, Maungakaretu, Mangapapa, Raketapauna, Rangiawaea, and Ngaurukehu B. Blocks, has been made by the Land Court; and the survey of the land allotted will be put in hand early next season, and should be available for settlement soon after.

The blocks under lease to Europeans contain about 475,000 acres, the principal being the Murimotu, Rangipowaiau, Owhaoko, Mangohane, and Ruanui, occupied by Mr. Studholme; and the Oroumatua, leased to Mr. Birch. Of others passed through the Native Land Court there are about 526,000 acres which are fit for settlement, the principal being the balance of the Awarua and the Motukawa, Raketapauna, and Rangiwera Blocks in the central district, Raetihi in the Waimarino district, and Tauakira on the Wanganui River. Those not suitable for settlement at present are the Te Hautu, Ohuanga, and Kaimanawa, on the east side, and the Oahukura on the west side, of Tongariro Mountain, containing an area of about 345,000 acres.

The Native lands which have not passed the Native Land Court contain an area of about 140,000 acres, the principal being the Tupapanui and Mairekura Blocks, between the Wangaehu and Wanganui Rivers, and some others on the west side of the latter river.

Pastoral and Agricultural Industries.

The pastoral industry is by far the more important, the total area in grass in 1897 being 2,064,938 acres as compared with 78,967 acres under crop. Of the area in crop, 8,978 acres were in wheat, 20,609 in oats, and 29,036 acres in turnips or rape, the rest being in potato or other crops.

The following figures will show the average return per acre of grain, for the year 1897: Wheat, 25 bushels; oats, 30 bushels; barley, 29 bushels.

The area in sown grass now exceeds that in any other district in the colony, though the area under crop is very small as compared with either the Otago or Canterbury Districts. In 1896 there were 3,746,622 sheep; and in January, 1897, the cattle numbered 223,724, and horses 39,797. The total area in gardens is given as 2,154 acres; in orchards, 3,466 acres; and in plantations, 3,001 acres.

Dairy Industry.

Both soil and climate are well adapted for the production of butter and cheese, and hence we find creameries and butter-factories increasing in number very considerably each year, and the export constantly augmenting.

Eighteen butter- and cheese-factories were returned in April, 1896, as at work in the Wellington Provincial District.

Phormium Tenax.

The principal flax-mills working are at Featherston, Carterton, and Martinborough, in the Wairarapa, and at Foxton on the West Coast. This industry fluctuates greatly, in accordance with the price ruling for the dressed article. In 1896 thirteen mills were at work, employing 207 men and 35 boys; the machines driven by water-wheel or engine working up to 124-horse power.

Timber Industry.

Sawmills are to be found in different parts of the district where the means of communication are sufficient, the timbers cut being principally totara and red pine, both of which are largely used in house construction and other works. Others of the native woods are very beautiful, but are utilised only to a small extent.

The principal mills are at Pahiatua, Eketahuna, Masterton, and Carterton, in the Forty-mile Bush and Wairarapa districts, and at Levin on the West Coast, besides which there are several mills in Wellington for dressing the rough material. In the whole district there were in 1896 sixty-four mills, of an aggregate of 1,117-horse power, engaged in this industry, employing 975 hands, the output of

sawn timber being 34,605,504 ft., and the total value, including posts and rails, resawn timber, doors, sashes, &c., £157,107, which, next to Auckland, is the highest for any provincial district in the colony.

THE MARLBOROUGH LAND DISTRICT.

C. W. ADAMS, Chief Surveyor.

Boundaries.

The Marlborough Land District, occupying the north-east corner of the Middle Island, and containing about 2,560,000 acres of land, is bounded generally on the north and east by Cook Strait and the East Coast as far as the Conway River; thence by that river to its source; from this point, by straight lines, rivers, and the summits of watersheds to the western side of Tennyson Inlet, Pelorus Sound. From the Conway to Pelorus Sound it abuts on the Land District of Nelson.

The widest part of the district is from Cape Campbell to Tophouse, a distance of about sixty-seven miles.

Physical Features.

The district throughout is generally mountainous, but none even of the highest peaks are covered with perpetual snow, although Tapuaenuku, the highest of the Inland Kaikouras, attains an altitude of 9,462 ft. Of the Seaward Kaikouras, or Looker-on Mountains, the highest points are Kaitarau and Whakari, which are 8,700 ft. and 8,500 ft respectively. There are several lesser peaks, from 4,000 ft. upwards.

The view from Kahautara Bluff, south of Kaikoura Settlement, looking northwards, when the Looker-on Mountains are snow-capped, is said to be one of the finest in New Zealand.

Geologically, the district may be briefly described as follows: North of the Wairau River the rocks belong chiefly to the Upper and Lower Devonian series, with a belt of Silurian between them, embracing the country along the west of Queen Charlotte Sound to Cook Strait. Within these series auriferous deposits are found, and at present worked at Mahakipawa, Wakamarina, and Wairau Valley. In Endeavour Inlet an antimony-mine has been worked for some time. The country south of the Wairau River may be said to belong chiefly to the Carboniferous Age, with patches, along the coast and up the Clarence Valley, of Cretaceo-Tertiary and Lower Greensand formations; while along and between the Awatere and Clarence Rivers volcanic formation and numerous intrusive dykes occur. The Red Hills also, at the head of the Wairau Valley, are of volcanic origin.

Coal has been discovered in the neighbourhood of Picton, and in the Clarence Valley, but none has been as yet successfully worked within the district. A narrow belt of Tertiary limestone, suitable for building purposes, extends, with small interruptions, from Cape Campbell to the boundary of the Canterbury Provincial District. The Marlborough land may be divided into three classes: Open land, generally covered with associated grasses; forest-land; and intermediate, or land partly forest, partly covered with scrub, fern, or other rank vegetation. This original condition of the soil naturally gave rise to a localisation of industries, and a very unequal distribution of settlement. Thus the open country was taken up for pastoral purposes; in the forest country the timber industry was developed, and the intermediate land passed into the hands of farmers. Though agriculture is now extending into the pastoral and forest country, and considerable areas of forest-land have been cleared and laid down in grass, the portions of the district characterized by these respective industries are still well defined.

In the northern part of the district, bounded by Cook Strait, numerous deep fiords and bays run far into the land. The principal of these are Queen Charlotte and Pelorus Sounds, which are remarkable for the number of their reaches and

inlets, and the beauty of their precipitous and forest-clad hills, culminating in Mount Stokes, 3,943 ft. above the sea.

Rivers.

Four considerable rivers, the Wairau, Awatere, Clarence, and Conway, rise towards the western boundary of the district; the two former, running east and north, fall into Cook Strait; the two latter, taking a southerly and easterly course, discharge into the sea on the eastern side of the Island. These rivers water large and fertile valleys, but none can be entered by vessels except the Wairau, which is navigable for small steamers for about ten miles from its mouth.

Plains.

The Wairau Plain, containing about 65,000 acres, on which stands Blenheim, the capital of Marlborough, is the principal block of agricultural land within the district. The soil, generally good, is, on the lower or seaward side of the plain, extremely fertile, especially in the neighbourhood of Tua Marina, Spring Creek, and near Blenheim, which is surrounded by numerous gardens, with rich deep mould, and well sheltered with trees. The average yield of wheat for the plain is about 25 bushels per acre; of oats and barley, 35; of peas, 30; and of potatoes, 10 tons per acre. Hops have been successfully grown for many years in the neighbourhood of the town, but, owing to the high price of labour, their cultivation has not extended. The plain, traversed in all directions by good macadamised roads, and dotted over with numerous comfortable homesteads, standing in clumps of trees amidst well-cultivated fields, has already an old-world appearance. More than half the population of the Marlborough Land District—12,677, according to the last census—is centred in the Town of Blenheim and on the Wairau Plain. Besides this plain there are several thousand acres of terrace flats and valleys along the larger rivers, notably at Starborough, on the Lower Awatere, all suitable for closer settlement, and capable of sustaining a large population.

Lakes.

There are not any lakes worthy the name. The largest is Kapara te Hau, more familiarly known as Grassmere, situate on the coast between the Awatere River and Cape Campbell. It is about three miles in diameter, and very shallow, being, indeed, no more than a lagoon, as during a dry season there is little or no water in it.

The only other known lake is Lake McRae, situate in the open country between the Awatere and the Clarence Rivers.

Forests.

The portion of Marlborough north-west of the Wairau River, extending to the boundary of the Nelson Land District, and including the County of Sounds, in all about 280,000 acres, was originally covered with dense forest. In the valleys and on the lower hill-slopes, rimu, kahikatea, matai, totara, miro, and tawa were the principal forest-trees. The higher portion of the hills and steep spurs are clothed with the various species and variety of birch (beech), to which along the shores of the Sounds were added pukatea and kohekohe, the latter locally called cedar.

Since 1860 sawmills have been at work in various parts of the district. Thirty-two mills have been erected, and have worked for longer or shorter periods. Havelock, on the Pelorus Sound, is at present the head-quarters of the timber trade.

The hills along the shores of the Sound will, for many years, furnish birch sleepers. There are other timbers left in places, but nowhere sufficient to justify the erection of a mill, unless pukatea wood, hitherto neglected, could be utilised. It is a light, tough timber, well adapted for boat-building and for packing-cases. The quantity of pine timber remaining in the Kaituna and Onamalutu Valleys is small, but there is a good supply of birch and other wood, suitable for fencing and firewood. On these valleys the Wairau Plain is mainly dependent for timber.

The Pelorus Valley, with its tributaries the Wakamarina, Rai, Ronga, and Opouri Valleys, still contain about 300,000,000 ft. of convertible timbers, exclusive of the birch, of which there is a large amount of the best quality on the hills and terraces. The Wairau, Blenheim, and other districts extending southwards must depend for the future on this source for all their building material.

In the neighbourhood of Kaikoura, along the base of Mount Fyffe, and in the Hapuku Valley, there is another small block of forest-land in which three small sawmills have been erected. The quantity of timber suitable for sawmill purposes in this block is very limited, but it will furnish the neighbouring country with firewood and fencing for many years.

Soils and their Uses.

The Wairau Plain, which is the principal block of agricultural land, has been already dealt with. The second agricultural centre is in the neighbourhood of Kaikoura. The land extending along the base of Mount Fyffe, between the Kohai and Hapuku Rivers, about 13,000 acres in extent, is held in small or moderate-sized farms; the soil is good, the block known as "The Swamp," between Mount Fyffe and the Peninsula, being particularly rich. In the Pelorus, Kaituna, and Onamalutu Valleys, and in the Sounds, settlers following in the wake of the sawmills have already converted much of the land worked over into grazing-farms. The land is of three descriptions—alluvial flats, terraces, and hill-sides. On the flats in the larger valleys the soil is rich, producing heavy crops of oats, peas, beans, and potatoes, wherever it has been brought into cultivation. The terrace-land varies much in quality, but generally grows good grass, as do also the hills on which tawa formerly grew; the birch country being very barren. On the small bush-farms cattle-grazing is the chief pursuit. Out of over 11,400 head kept in Marlborough, 7,000 belong to the forest country.

Grazing.

About 1,680,000 acres of the Marlborough Land District are at present devoted to keeping sheep. The leaseholds in the northern parts of the district contain a large extent of scrub- and fern-covered country, now producing little or no food for sheep, but capable of improvement. The total number of sheep depastured is 827,597, distributed as follows amongst the counties into which the land district is divided: Marlborough County, 518,845; Sounds County, 119,567; Kaikoura County, 189,185. On the natural pasture of the open country merino sheep are kept almost exclusively, the land carrying from half to one sheep per acre. In the forest country, on sown grass, the land keeps from two to four crossbred sheep per acre. Along the shores of the Sounds large areas of hill-land have been taken up on lease, and are now being cleared and laid down in grass expressly for keeping sheep, but generally throughout the forest country the holdings are small or of moderate size; hence this is, after the Wairau Plain, the most populous portion of the district. The export of wool during last year amounted to about 13,000 bales.

Industries.

Gold-mining has been carried on for some years, principally at Mahakipawa, Wakamarina, and Wairau Valley. At present not much gold is being obtained, although there are now strong indications of a great improvement in the gold-mining industry.

There is one dredge at work in the Wakamarina River, giving fair results for the outlay.

There are at present four sawmills at work within the district: one at Kaikoura, and the others in the Pelorus, Kaituna, and Onamalutu Valleys. The principal one is Messrs. Brownlee and Co.'s, in the Pelorus Valley, the annual output being about 3,000,000 superficial feet. The value of the sawn timber shipped in 1896 from the company's wharf was £8,904, and they have recently imported new machinery, which will, when erected, increase the annual output by more than another million feet. The mill at Kaikoura turned out 120,000 ft.

Owing to the low price of dressed flax several of the mills have recently been closed, there being only four or five now at work. The quantity of hemp shipped during the year was 3,000 bales.

In connection with one of the mills, a rope-factory has been established, in which binder-twine made of short flax or tow is the main product.

There are two flour-mills at work—one at Spring Creek, near Blenheim, owned by Messrs. Redwood Bros. This is a complete roller-mill, driven by water-power,

and can turn out about 14 tons of flour in twenty-four hours. It is electric-lighted, and the sack-working machinery is driven by electric motor. The mill is not worked full time, but during the year the output was 758 tons of flour and 333 tons of bran and sharps. The other mill, which is also worked by water-power, is Messrs W. B. Parker and Co.'s, at Blenheim.

There is a dairy factory at Spring Creek which contains all the latest improvements in machinery; 22 tons of butter was produced in 1895.

There is a first-class cheese-factory at Tua Marina. The output last season was 50 tons, but the factory is capable of turning out 80 tons. There is also a good cheese-factory at Kaikoura, the output of which last season was 60 tons.

A rabbit-preserving factory has lately been reopened at Blenheim.

Climate.

Marlborough possesses one of the finest climates in the world; and at Blenheim it is fine weather nearly all the year round. There is almost a total absence of the boisterous winds that so frequently visit Wellington.

The original distribution of the open and forest lands was entirely due to climatic causes. At Cape Campbell, one of the barest places in the district, the annual rainfall is only 23·25 in.; in the Pelorus Valley, the centre of the forest country, it is over 65 in. This difference between the climates of the north-western and south-eastern portions of the district explains why the artificial pasture-land, when compared with the natural pasture, supports such a large amount of stock. Winter and spring are the wettest seasons, hence the dry climate is not unfavourable for agriculture. Wherever the soil is suitable, crops sown in winter and harvested in early summer can be successfully grown. Everywhere near the coast the range of temperature, considering the latitude, is very small. The thermometer seldom falls below 30 deg., or rises above 78 deg. Along the shores of the Sounds the mildness of the winter, owing to the curious distribution of land and water, allows lemons, oranges, passion-fruit, figs, and other sub-tropical fruits to be grown in favourable situations. On the lower hills and terraces of the forest country the chestnut (*Castanea vulgaris*) grows rapidly, and commences to bear fruit in five or six years. A few trees planted in the Pelorus Valley some twenty years ago are now yielding annually about 2 cwt. of nuts a tree. In all parts of the low country the common English fruit-trees—apple, plum, pear, cherry, &c., yield abundantly, the fruit, owing to the clearness of the atmosphere, being of excellent quality. In the high country, where snow falls occasionally during winter, red, white, and black currants can be produced in such quantities that with little labour they might be made an article of export to the warmer parts of Australia.

Towns.

The chief town, Blenheim, is situate on the Wairau Plain, at the junction of the Opawa and Omaka Rivers—a third river, the Taylor, would join at about the same point were it not that when not in flood it disappears beneath the surface, about three miles south of the town. Blenheim has been termed a miniature Christchurch, doubtless from its extreme flatness. Considering this, its streets are not so straight and wide as they should be. The Government Buildings, which comprise the Post and Telegraph Offices, Lands and Survey Offices, Courts of Justice, &c., form a handsome edifice in the centre of the town, which is well planted with deciduous and evergreen trees. It is about eighteen miles and a half from Picton by rail, and about nine miles from the sea by the Opawa River, which is navigable for small steamers. Blenheim is lit with gas, and supplied with water, principally by artesian wells. The population at the last census was 3,018.

The next town in importance is Picton, the principal port, only fifty-three miles by sea from Wellington. This little town, both in position and appearance, may be said to be the antithesis of Blenheim, being most picturesquely situated at the head of Queen Charlotte Sound, and nestling among hills, some of the higher ones still densely covered with birch and other forest. There is frequent communication with Wellington and Nelson by steamers averaging 500 tons, and vessels of 1,200 tons can lie at the wharf at low-water, where there is a depth of 25ft. Vessels of the largest

tonnage can approach within half a mile. The direct exportation of frozen meat from Picton commenced in 1892, when 16,433 carcases were shipped; last year Messrs. Nelson Brothers, who had a freezing-hulk at work, shipped about 20,000 carcases. This year the business of Nelson Brothers was acquired by the Wairau Freezing Company, which exported from Picton for the six months ended 30th June, 1897, mutton, 2,983 carcases, weight, 165,872 lb.; and lambs, 16,044 carcases, weight, 641,291 lb. The company expects to double this output during the ensuing season. Picton possesses a malting establishment also, producing for export, as the excellent quality of the barley grown on the Wairau Plain insures a ready market. A small quantity of oysters, mostly procured in Queen Charlotte Sound, is annually exported from Picton; with culture the supply might be almost indefinitely increased, many of the sheltered bays in both sounds being well adapted for the purpose. What is now being done along the Marlborough coast is a mere trifle compared with what might be accomplished if capital and knowledge were brought to bear on the fishing industry. Around the whole coast, from the mouth of the Conway to near the French Pass, the sea abounds in fish. Within the Sounds and amongst the islands of Cook Strait, hapuku, schnapper, moki, barracouta, raturi, kahawai, and rock-cod are extremely plentiful. Immense shoals of the southern herring (*Clupea sagax*) and of anchovies (*Engraulis encrasicholus*) frequent the inlets at certain seasons of the year, and quantities of fresh fish are exported from thence to various places within the colony. As steamers arrive at and leave Picton almost daily, shipments can be made without delay to all parts. Picton possesses a good gravitation water-supply. Its population is about 870.

Havelock, situate at the head of Pelorus Sound, is, as has been already stated, the present head-quarters of the timber trade, Messrs. Brownlee and Co.'s steam saw-mill, at the mouth of the Pelorus River, being only a mile or so from the town. Between Picton and Havelock there is a mail service twice a week, *viâ* Cullensville, on the Mahakipawa Gold-fields. The population of Havelock is about 365.

The Town of Kaikoura, the greater part of which is built on a raised shingle-beach, is situate at Kaikoura Peninsula, near the southern boundary of the district. The town, with the adjoining settlement of small farms, forms one of the most picturesque spots in New Zealand, lying as it does under the Seaward Kaikouras, or Looker-on Mountains. At the back of the town the peninsula, which is composed of Cretaceo-tertiary limestone, rises abruptly for about 100 ft., and affords splendid sites for dwelling-houses. Kaikoura is connected with Blenheim by a weekly coach service, the distance being about ninety-five miles. There is also direct steamer communication with Wellington and Lyttelton. The population of the town is about 395.

Roads and Railways.

The only railway is that between Picton and Blenheim, about eighteen miles and a half in length. The train, starting from Picton, runs twice a day. The railway has been completed for a distance of three miles south of Blenheim, and it is in contemplation to extend it as far as the Awatere River, which is shortly to be bridged with a railway and traffic bridge at a cost of £19,000, which will be a very great boon to the district.

The Main North Road to Nelson, distant seventy-eight miles, is a good metalled road nearly the whole way. It runs up the Wairau Valley from Blenheim for about six miles, crosses the Wairau River into the Kaituna Valley, which it follows as far as Havelock—about twenty-eight miles. It then runs up the Pelorus and Rai Valleys, and ascends by easy gradients to the Brown Saddle, where it crosses the boundary into Nelson. An excellent coach-service—probably the best in the colony—has been established for some years, the coach running to and from Nelson on alternate days, covering the distance in eleven hours, and another bi-weekly coach-service has lately been established between Blenheim and Havelock.

The Main South Road, running over the Taylor Pass into the Awatere Valley, and through the Starborough, Flaxbourne, Kekerangu, and other properties, connects Blenheim with Kaikoura and the south, and is a good road during dry weather, although it might be much improved in places.

The portion between the Clarence River—over which a fine bridge was built

some years ago—and the Hapuku River, runs along the coast under steep and picturesque hills covered with forest. Were a road constructed south of Kaikoura to connect with Cheviot it would open up some of the most beautiful coast scenery in New Zealand.

A good road has been formed up the Wairau Valley, passing through the Bankhouse, Erina, Lansdowne, Hillersden, and Birch-hill properties, and connecting with Tophouse, just outside the boundary, and distant fifty-six miles from Blenheim. At Tophouse there is an hotel and a telegraph-station, and from thence a good road leads to Belgrove, the present terminus of the Nelson Railway.

A coach runs twice a week between Blenheim and Wairau Valley—twenty-five miles—where there is an hotel, a post- and telegraph-office, and one or two stores.

There is also a good cart-road running up the Awatere River—which it crosses and recrosses several times—as far as Molesworth Station, about seventy miles from Blenheim. Between these points there is a weekly coach- and mail-service.

There are other minor roads and bridle-tracks throughout the district too numerous to specify.

The area of Crown lands at present available for settlement is about 200,000 acres, but of this area 135,000 acres are of very poor quality, being chiefly the summits of high, rugged country. The balance of available area lies principally in the Pelorus, Rai, and Wakamarina Valleys, and in the Sounds, and will doubtless be readily taken up when thrown open for selection.

THE NELSON LAND DISTRICT.

T. HUMPHRIES, Chief Surveyor.

General Physical Description.

The Nelson Land District comprises the north and north-western portion of the Middle Island, the greater part being high and mountainous, and on the western and inland ranges covered with dense forest to the bush-limit, at from 4,000 ft. to 4,500 ft. Cape Farewell, the northernmost point, is situated at the western entrance of Cook Strait, on the south side of which lie Golden or Massacre Bay, and Tasman Bay, more commonly called Blind Bay. The former derives its name from the massacre of a boat's crew belonging to Tasman, who visited it on the occasion of his discovery of New Zealand in 1642. At the head of the latter, which has a depth of fifty-four miles from its entrance, stands the town of Nelson. From Separation Point, on the western side of Blind Bay, a range of mountains from 3,000 ft. to 4,000 ft. in height extends southward to Mount Murchison. It consists of a granitic formation, with slate, limestone, and sandstone belts. From Pelorus Sound, on the east, commences another range—a portion of which is serpentine, forming a mineral belt immediately south of Nelson City. It reaches an elevation of 6,000 ft., and runs in a south-westerly direction to the St. Arnaud Range, terminating in the Spencer Mountains, a large central mass attaining a height of 8,000 ft. above the sea-level. To the westward of the Spencer Ranges and those on the further side of Blind Bay are the Brunner, Lyell, Marine, and Tasman Mountains, from 5,000 ft. to 6,500 ft. in height. Still further westward along the coast are the Paparoa, Buckland Peaks, and Papahaua Mountains, about 4,500 ft. at their highest point, and the Whakamarama Range, extending from Rocks Point to Cape Farewell. There are also a number of isolated mountain-masses here and there through the district.

The inland Spencer Mountains are the source of the principal rivers of the district south of the Buller River, and are thus described by Sir Julius von Haast: "On the southern slopes of this wild alpine-stock we find the principal sources of the Grey, or Pohaturoha; on its north-east side the sources of the Wairau; on its eastern side those of the Acheron and Clarence; and in the deep recesses of these snow-clad giants those of the Waiau-ua, or Dillon: so we may say that, with the exception of the Takaka and Aorere, which fall into Massacre Bay, the Wangapeka

and Motueka, which run into Blind Bay, the Karamea and smaller streams, which reach the sea on the West Coast to the north of the Buller River, all the rivers of any size in the northern part of this island take their rise in this magnificent chain."

Rivers.

The Buller River (Kawatiri) has its source at a point about sixty miles south-west from Nelson, where it flows out of the beautiful alpine lake Rotoiti, lying 1,800 ft. above sea-level at the foot of the lofty St. Arnaud Range. This river breaks through the massive mountain chains of the interior in a transverse or easterly direction, forming, where it receives no tributaries, a succession of magnificent rocky gorges, and, after a course of about one hundred miles, finally discharges its waters into the ocean on the West Coast. The Gowan River, a tributary, has its source in another exquisite lake, Rotoroa, 1,623 ft. above sea-level. Other tributaries of the Buller are: the Matakitaki, Maruia, Owen, Matiri, and Inangahua, all of which take their rise in the snowy ranges.

The Grey River (Mawhera), also discharging its waters on the West Coast, takes its rise in Lake Christabel, near the western flank of the Spencer Range. It has a very large basin, and numerous tributaries, of which the Ahaura is the chief.

The rivers on the eastern side, named above as taking their rise in this district, flow for the most part through mountain ranges and open valleys utilised as pastoral land.

Lakes.

The lakes of the district are alpine in character, surrounded by grand mountain and bush scenery. The principal are: Rotoiti, lying east, and Rotoroa south-east, of Mount Murchison; Matiri, to the west of Owen Range, 980 ft. above the sea; Lakes Tennyson, 3,614 ft., and Guyon, 2,658 ft., on the eastern flank of the Spencer Mountains; Lake Christabel, on their western flank; Lake Hochstetter and Lake Sumner, the latter 1,725 ft. above sea-level, lying under Mount Emerson (6,000 ft.).

Plains.

The plains of this district are limited in extent, the principal being the Amuri, in the valleys of the Hurunui and Waiau-ua, in the centre of which rises a partly isolated mass of hills called the Percival Ranges, the highest peak of which is Mount Percival, 5,335 ft. These plains, being well covered with native tussock-grass, were either purchased or taken up with pre-emptive rights as pastoral land very soon after the commencement of the settlement. The Waimea Plains, near Nelson, with the Lower Motueka, Riwaka, and Takaka Valley lands, formed part of the original settlement of the New Zealand Company, and are occupied mostly by small settlers. Inland are the Tiraumea Plains, 1,100 ft. above sea-level, and the Maruia, 1,300 ft. These are, together, about 30,000 acres in extent. They are surrounded by high mountains heavily timbered, and the land is of only second-rate quality. On the West Coast the level lands are Totara Flat and Ikamatua Plains, in the Grey Valley, Mawhera-iti, and Inangahua Valleys, lying on the eastern flanks of the Paparoa coastal range. There are also open *pakihis* at Addison's Flat, on the south side of the Buller, and low swampy lands on the north side; northward is the heavily timbered country of the special settlement at the mouth of the Karamea.

Forest.

The area of the district is estimated at about 7,000,000 acres, of which the area of open land under 2,000 ft. in altitude is, approximately, 1,835,000 acres; the area of forest-land under 2,000 ft., about 1,745,000 acres; open land over 2,000 ft., about 1,470,000 acres, including summits. The forest-lands may be approximately estimated at 3,290,000 acres, including good forest, mountain-forest, timber patches in gullies, &c. Of this area probably about 1,000,000 acres would be the utmost available for clearing. The timber on the western side consists of red- and white-pine, matai (or black-pine), totara, kawhaka (or cedar), rata, and occasional silver-pine, besides black- and red-birch (*Fagus fusca*). These varieties are also found, but in smaller areas, on the eastern side; birch preponderating. A large amount of timber is used in the mining industry for props and planking, and throughout the

districts generally for shingles, fencing, firewood, sleepers, &c. There are forty-two sawmills at work, with an output of about 9,000,000 superficial feet per annum.

Agricultural.

Nelson has little land suitable for agriculture, most of it already taken up. On the Waimea Plains is grown excellent barley, a small quantity of which is exported. Oats and chaff are sent in large amounts to the West Coast and elsewhere. Hops also form one of the chief exports. Wheat, maize, rye, and root-crops of most varieties are grown, and fruit is plentiful. The weekly wage of a farm-labourer is 20s. with board; without board he would receive 5s. a day. Ploughmen can get 20s. per week with board; without, 7s. 6d. a day.

Pastoral.

The total area of pastoral lands held under the Crown by 120 tenants on the 31st March, 1897, amounted to 438,475 acres. As the agricultural land is limited, settlers are turning their attention to the timbered mountain-slopes for grazing purposes. These, when the timber is felled and burnt, and the ground sown with suitable grass, will, after three to four years, carry about two sheep to an acre on fair soil, and more on the limestone country. The cost of felling and burning green timber is from 15s. to 20s. per acre; cost of mixed grass-seeds and sowing, about 15s. per acre; and a good paling-fence on ordinary bush-lands with double No. 8 wires at top and bottom, with ½ in. palings and 7 in. posts sunk 2 ft. in the ground, can be erected at about 12s. per chain.

Mining.

The western side of the Nelson District was a *terra incognita* till about the year 1863, when gold was first discovered in large quantities. Miners flocked in at first from the other goldfields in New Zealand, then from Australia, California, and other parts of the world, until in 1865 the whole coast-line was peopled from Broken River in the north to Jackson's Bay in the south. Mining, at first altogether alluvial, developed into quartz-reefing, and hydraulic-sluicing of large areas. The agricultural lands about the Grey and Inangahua were taken up and cultivated; and, as mining became a more settled industry, the miners occupied and tilled the non-auriferous alluvial flats in the many valleys: hence at the present time a number of homesteads are scattered throughout the district.

Reefton and its neighbourhood forms one of the chief quartz-mining districts in New Zealand; and the West Coast, including Westland, has produced about 45 per cent. of the total gold raised in the colony. The oldest alluvial field is at Collingwood. Among other minerals found in the district are: silver, copper, chrome, antimony, manganese, and hæmatite. Extensive deposits of coal are found on the West Coast, within the areas of the Grey and Buller Coalfields Reserves. Coal is also found in Collingwood, in Blind Bay, and in West Wanganui Inlet; and there are numerous smaller areas of coal-bearing strata here and there throughout the district. The output from the mines at work within the district during the year ending 31st December, 1896, was 404,885 tons. Copper-ore is found in a serpentine rock-formation near Nelson, but the companies which have worked the ore have not hitherto been successful—the last one, "The Champion," failing from want of sufficient capital. Deposits of chrome-ore are also found here. Silver-ore has been worked in the Collingwood District; and at Parapara, in Blind Bay, there are widespread deposits of hæmatite iron-ore, combined with limestone and coal, waiting only for capital to develop them. There is also a small industry in flax. It will be readily gathered from the above brief description that mining is the chief industry of the Nelson District. A great impetus has been given to the mining industry on the West Coast, in a manner similar to that which has taken place on the Auckland goldfields. In the Reefton district a large English syndicate has bought out several properties of quartz-mining companies, which have been paying concerns, although worked with limited capital and old-fashioned machinery, with the view of introducing the newest methods of working and the most improved gold-saving appliances. A number of wealthy syndicates are now in

the field, and a great revival has taken place in prospecting for new reefs, and in developing numbers of others known to be auriferous, the working of which has hitherto languished for the want of capital to develop them.

The timber industry on the West Coast has now become a very important trade. During the past year about 4,000,000 ft. of various kinds of wood, principally red and black pine, have been cut in this district alone for export, and silver-pine has been largely in demand for railway-sleepers for home consumption.

Towns.

The chief town is Nelson, situated at the head of Blind Bay, in 41° 16′ S., and surrounded on all sides, except the north, by mountains reaching an elevation of 3,500 ft. With a mean temperature of 54·8° Fahr. it possesses a climate almost unequalled for its beneficial effects on invalids suffering from pulmonary diseases. There are many picturesque spots in the suburbs, and the town itself, with its cleanly-looking buildings and well-kept gardens, is one of the most charming spots in New Zealand. There is an old-established Boys' College, and a High School for Girls, besides Government and other schools. The Anglican Pro-Cathedral, built on the summit of a central hill, memorable as being the site of fortifications erected in the early days of the settlement for defence against an expected attack of the Natives, is a striking feature. The Roman Catholic Church, Convent, and school-buildings cover a large extent of ground. There is also at Stoke, a small village three miles from Nelson, a central Catholic Orphanage, surrounded by grounds of considerable area. There is a good supply of excellent water from a reservoir in the hills at the back of the town, and the streets are well lighted with gas. The several Government departments are housed in one roomy building, containing a large hall used for Supreme Court sittings and other public purposes. Nelson has a small natural harbour, formed by a boulder-bank running for eight miles parallel to the shore, deep enough at high tide to admit vessels of 1,000 tons burden. It is a port of call for the Union Steamship Company's coastal steamers, and has a small local fleet plying between the West Coast, Blind Bay, Picton, and Wellington. The town is reached from the eastward by a good main road from Marlborough. A railway-line has been constructed up country to the southward for thirty miles, passing through the farming villages of Stoke, Richmond (borough), Brightwater, Wakefield, Foxhill, and Belgrove. Leaving for the West Coast by a good main road, the traveller starts from the Belgrove Station on one of Cobb and Co.'s coaches, crosses Spooner's Range, the Clarke and Hope River saddles, and enters the Buller Valley at the junction of the Hope, about sixty-seven miles from town. He then enjoys a succession of views of mountain-gorge scenery, and, after traversing a gorge of seventeen miles in length, arrives at the Lyell, 107 miles from his starting-point. This is an alpine township, in a small quartz-mining neighbourhood. Here is a fine cast-iron girder bridge, spanning a rocky gorge of the Buller, and springing boldly from a bluff on the northern side. At 116 miles the junction of the Inangahua with the Buller is reached, the main road continuing to Reefton, with a branch road twenty-eight miles to Westport, which for twelve miles passes through some of the grandest river-gorge scenery in New Zealand.

Westport, the town next in importance to Nelson, is situated at the mouth of the Buller River. The harbour is sheltered from southerly gales by Cape Foulwind and its outlying rocks, and is accessible in nearly all weathers. A large sum has been spent on a system of harbour-works, designed by the late Sir John Coode. Westport is the place of shipment for the coal-mines lying northward as far as the Mokihinui River. The character of this coal for steam purposes stands almost unrivalled. The long line of coal-staiths on the northern bank of the river, with a fleet of steam-colliers loading alongside, does not fail at once to impress a visitor with a sense of the importance of the trade. Though much has already been done, yet the industry, from the extent of the coal-bearing strata, is capable of much larger expansion when the necessary capital can be found. The Westport-Ngakawau Railway to Mokihinui, connects with the mines and conveys the coal to the port. At the foot of the Mount Rochfort plateau, nine miles from Westport, is Waimangaroa, and on the plateau itself is Denniston—both coal-mining villages. The

latter, built at an elevation of 1,960 ft., is said to be the highest township in New Zealand. On a clear day it is well worth a visit, for the sake of enjoying the magnificent panoramic view of the southern Alps, which reach their highest point in Mount Cook, 12,349 ft. high, about 100 miles south. South of Westport are the alluvial gold-mining centres of Addison's Flat, Croninville, Nine-mile Beach, and Charleston.

From the Inangahua Junction, the main road continues southward through the Inangahua Valley, passing through cultivated lands, which are being gradually won from the heavy bush, and at a distance of 136 miles from Nelson reaches the township of Reefton. Here, as at Westport, are good hotels, and, as in every one of the larger coast towns, a hospital receiving a Government grant in aid. This town was the first in New Zealand to be lighted by electricity. Through the Midland Railway Company's extension of the Grey–Brunner Government line, Reefton is now connected by rail with Greymouth, from whence it is for the most part supplied. About two miles inland from Reefton is Black's Point mining township, with several batteries at work in and about the place, a visit to which is generally paid by tourists wishing to see something of the gold-mining industry. Other small mining townships are: Boatman's, Capleston, Antonio's, Noble's, Orwell Creek, Hatters', Nelson Creek, and Twelve-mile.

Leaving Reefton by rail, and passing into the Grey Valley through a short tunnel, and by a bridge over the Grey River, Totara Flat is reached, nineteen miles distant. Here there is a considerable area under cultivation. Seven miles farther on is the decayed mining township of Ahaura. Small townships are springing up along the railway-line, and several large sawmills are working.

At the Grey River Gorge, eight miles from Greymouth, we enter the Borough of Brunner. This place is the oldest centre of coal-mining in the district. Owing to the effect of the coal-smoke from the coke-ovens on the surrounding cliffs and bush, and the appearance of the numerous miners' cottages nestling on the mountain-slopes, it has the look of a veritable "Black Country," such as may be seen in some coal-districts in England.

Several large sawmills are at work between this place and Greymouth, which we reach at a distance of 180 miles from Nelson, the centre of the Grey River from its junction with the Arnold being the southern boundary of the district at this part. The Midland Railway line, to connect with Canterbury by way of Arthur's Pass in the Otira Gorge, has been constructed on the Westland side of the Arnold River to Lake Brunner, the eastern shores of which it skirts for some distance, and from thence to the Teremakau River.

The town of Greymouth is situated on the south bank of the Grey River, in the Westland District, and is the shipping-port for the products of the coal-basin included within the area of the Grey Coalfields Reserve, the larger portion of which lies on the north bank of the river in the Nelson District.

The small town of Cobden is situated opposite the town of Greymouth, and is connected with it by a substantial bridge.

Roads, Tracks, &c.

Situate on the coast, fifty miles north of Westport, is the Karamea Special Settlement, principally settled from the Nelson and Motueka Valley districts. This part of the district contains some excellent but heavily-timbered land, and is reached from Westport by a good road, connecting with the Westport–Ngakawau Railway at the Mokihinui River. A bridle-track, also, connecting with Collingwood and Golden Bay, is nearly completed by the Government. This track passes along the coast northwards, thence up the Heaphy Valley to the Golden Downs, and down the Aorere Valley to Golden Bay. Here again is another coal-basin, which, though of inferior value to the older deposits on the western side, is likely to become of importance, having at the present time one mine in full work. Another coal-basin exists at West Wanganui and Pakawau.

In the Aorere Valley, of which Collingwood is the port, alluvial mining is still found to be payable, and the country contains some valuable timber in the upper part not yet utilised. Nineteen miles south, in Blind Bay, lies the small port of

Waitapu, from which a considerable amount of sawn timber is exported, drawn from the Takaka Valley, and brought down by a steam tramway from the upper mills. From the head of this valley the main road is carried over a pass in the Pikikirunga Range, 3,476 ft. high, through the villages of East and West Takaka, Riwaka, Motueka, and Moutere to the town of Richmond, eight miles from Nelson. Inland are also the villages of Ngatimoti, Dovedale, Tadmor, and Sherry, each the centre of a number of small farms, and all connected by fairly-good dray-roads.

An inland road, partly bridle-track and partly dray-road, has been made from Nelson to Canterbury, by way of Tophouse, Wairau Gorge, Tarndale, Clarence Valley, Jollie's Pass, and the Waiau Plains. On the Hanmer, a tributary of the Waiau-ua, is a Government Sanatorium, at an elevation of 1,000 ft. above sea-level, and among hills 6,000 ft. high. Here there are hot mineral springs, much visited by persons suffering from rheumatism and skin-diseases. It is reached by coach and rail from Christchurch in ten hours. The main-trunk railway-line is constructed to Culverden, twelve miles north of the Hurunui, the southern boundary of the district. From Culverden a good coach-road passes through Rotherham and Waiau-ua to the East Coast at Kaikoura, connecting with Blenheim and Nelson.

Crown Lands.

About 3,000,000 acres of Crown lands still remain unoccupied in the northern part of the Nelson District; they consist principally of high bush-country, with occasional patches of good valley-lands, the greater part being classed as second-class land. Of these, the area open for selection to date comprises 30,142 acres of surveyed lands, and 272,258 acres unsurveyed lands, of which the location, nature of soil, &c., have been briefly described in the foregoing pages.

THE WESTLAND LAND DISTRICT.

W. G. MURRAY, Chief Surveyor.

The Westland District occupies the central portion of the western watershed of the Middle Island, joining Canterbury on the east; its north and south boundaries with Nelson and Otago being the Grey, Arnold, and Awarua Rivers. The mean length is 200 miles, and its average width 24 miles. The area is 4,759 square miles, composed, for the most part, of the great central snow-clad mountain chain and its out-running ranges, intersected by narrow bush-clad valleys, and subsiding westward into undulating plateaux, river-straths, and shelving coasts.

Physical Features.—Mountains.

The great dividing range which constitutes the eastern boundary from Harper's Pass to Mount Aspiring presents a magnificent façade of snow- and ice-clad summits, representing every aspect of mountain grandeur, such as spires and battlements of rock protruding from ice and snow; precipices of enormous height, with cascades; drifted expanses of snow-fields, feeding glaciers; cañons, and ravined foot-hills covered to the top with forest.

Rivers.

A few of these lead from the foot-hills, and are of small volume; the others are snow-born streams descending from the central range, at first in narrow gorges amongst the mountains, but spreading widely on reaching the sea-board country. They are shallow shingly streams in winter, but swift deep rivers in summer. In the northern district all the larger rivers are bridged; and southward, ferries are placed on all the main streams, which, from the melting of the snow, are practically unfordable from September to January.

Forests.

Generally speaking, the whole of the district is covered with dense forest, from the sea-beach to the grass-grown tops of the high ranges, even the gaunt, broken mountain-faces being wrapped with exuberant foliage. The varieties of trees differ considerably according to soil and altitude. Kamahi and rata are the chief timbers, very useful for firewood, and, spread over the whole country, constitute an almost inexhaustible supply. Rimu is the chief milling timber, and this also is widely distributed from the sea-board to the interior uplands. Valuable stretches of white-pine belt the low-lying depression of the coastal lands, and the same may be remarked concerning the imperishable silver-pine. Clumps of black-pine of good quality are met with, also rarer patches of marketable totara; while serviceable cedars are scattered along the flanks of the inland ranges and all over the lower hills and plateaux. The approximate area of forest equals 2,394,951 acres, of which about 940,500 acres carry timber fit for the saw-mill, and some 903,785 acres dwarfed alpine varieties.

Lakes.

A considerable and varied number are dotted over the district, no two being alike, but varying in character: comprising mountain tarns; coastal tidal lagoons; shallow reedy sheets; deep mountain-girt waters—all more or less forest-locked, and presenting every form of lacustrine beauty. In conjunction with their effluents they form valuable water-ways for light transport to adjacent districts.

Soils.

The high pastoral uplands have a coating of rich moulds, and this continues fairly good down to the heavy timber lands. The alpine forest is readily cleared, burns clean, and imported grasses grow luxuriantly, cocksfoot being the best, as it withstands fire and frosts. The lower flanks of the mountains hold a thinner soil, which at present hardly repays the heavy labour of felling; while the lower heights are somewhat abrupt and unfitted for cultivation. A margin, varying in width, of fertile slopes and fans fringes the bases of the hills, and, having a natural drainage, constitutes an area of excellent agricultural land.

The upland soils of the coastal undulations and terraces are light loams of moderate fertility, which rest upon transported gravels, the drifted accumulations of eroded hills. On these plateaux are numerous "pakihis," or natural clearings, which are mostly extensive tracts of swampy lands, with a peaty soil resting on thin layers of impervious clay, and non-porous gravels, or, in a few cases, on impacted glacial moraines: these formations all overlying loose drifts. The reclamation of these areas is only a matter of time, as the bulk of them are quite drainable.

Stretches of good alluvium border the rivers, streams, and sea-coast, and form the favourite location for settlers.

Climate.

The climate is equable and temperate, remarkably free from storms and fogs; and immediately after bad weather the clouds roll inland, and there is a prevailing clearness of sky. The rain-bearing winds are mostly from the north-west and north-east. The southerly winter gales usually coat the great ranges with snow, which, however, rarely falls below 2,000 ft.

Pastoral Lands.

The total area of pastoral lands amounts to 2,002,577 acres, 103,801 of which constitute high mountain grass districts, the balance, 1,898,776 acres, comprising the ordinary bush-clad country, much of which is quite inaccessible to stock. All over the coastal lands, along the slopes of the lower hills and in the bottoms of the valleys, large herds of cattle are bred and fattened on the dense undergrowth of the forest. The tussock herbage of the high lands is being gradually used by sheep-farmers, and in the near future these natural pastures will support large flocks.

Agricultural Lands.

The agricultural lands comprise some 307,344 acres of forest and 16,440 acres of open surface, such as swamps, grass-grown river-beds and fringes, &c. The bulk

of these lands, when cleared of bush, grow abundance of root-crops, especially turnips, which are much used for fattening purposes. The even and moist temperature encourages the almost uninterrupted growth of grass and clover, which are very luxuriant, and favour stock-raising. Oats are also grown abundantly for local consumption, and for the most part are cut into chaff. Year by year the imports of potatoes, fruits, butter, and fat stock are decreasing, owing to increased local production.

Means of Communication.

The district is fairly well provided with means of communication. The railway now extends from Hokitika, *viâ* Greymouth, to Reefton, branching at Stillwater to Jackson, in the Upper Teremakau; and a further extension to Otira is now being constructed. Coaches twice a week connect with Canterbury, *viâ* Arthur's Pass, and ply daily between Ross, Hokitika, Kumara, Greymouth, and the neighbouring towns: while once a week a mail is conveyed on horseback southward to Gillespie's Beach, and once a fortnight to Jackson's Bay. A subsidised steamer runs between Hokitika and the numerous southern ports as far as Jackson's Bay, plying every two months, thus enabling settlers to obtain supplies and to ship their cattle and produce to market. The Government steamer also calls at Big, Jackson's, and Bruce Bays on her quarterly trips from Dunedin. Steamers also trade regularly between Hokitika and Greymouth, and other parts of the colony. The Main South Road, which for many miles skirts the foot of the main range, has been so greatly improved of late years that the traveller can now ride comfortably and safely *viâ* Haast Pass right through into Otago. Numerous bridle-tracks branch from the trunk line to various points, while the large open river-beds likewise give access to the country on either hand. From Jackson's Bay horse-tracks have been made, *viâ* Cascade River and Barn Bay, to open up the southernmost country. Sundry *cols*, varying in height from 1,800 ft. to over 7,000 ft., leading down the central range, have been explored, mapped, and during the summer months are crossed from time to time by experienced mountaineers. Of these depressions, the only sub-alpine saddle is Haast Pass, all the others being liable to blocks by winter snows. A coach-road over Arthur's Pass and a horse-track through Haast Pass have been made. Another bridle-road is also in course of construction across Whitcombe's Pass, but between these points no trans-insular road exists. Tracks have also been constructed giving easy access to the Franz Josef and Fox glaciers, and in the future, as population increases, doubtless tourist and stock tracks will be constructed along many of the intervening routes. From Okarito northward the district is in direct telegraphic communication with the rest of the colony.

Harbours and Ports.

The harbours and ports of Westland are the following:—

Greymouth, twenty-four miles north-east of Hokitika: Extensive harbour-works have been carried out. A breakwater or sea-wall extends some 3,392 ft. seaward from the mouth of the river on the south side, and on the north side 1,125 ft., with internal half-tide training walls, the result being an average depth of water on the bar of 20·7 ft. at high water and of from 8 ft. to 16 ft. at low water. Vessels of 1,000 tons can now come alongside the wharf. There is berthage accommodation of 1,824 ft., with a minimum depth of 12 ft. to 16 ft. at low water. The principal exports are gold, coal, coke, and timber. The number of vessels that entered the port during the year 1896 was: 550 steamers, tonnage 136,572; 45 sailing-vessels, tonnage 7,349: being a total tonnage of 143,921 for the year. The train runs down the wharf, and the coal-trucks, specially made for the purpose, are lifted and emptied into the vessel's hold by means of powerful cranes, of which there are six, with capacities of from 1½ tons to 12 tons, so that every encouragement is given to quick despatch.

Hokitika: Two training-walls have been constructed, the one on the north side being about 2,000 ft. long, while that on the south is 670 ft. The bar is one of shifting sand, and the depth at high water varies from 9 ft. to 15 ft., while inside the depth is from 6 ft. to 22 ft. for three-quarters of a mile up from the entrance. For ten months out of the twelve the port is usually safe for vessels drawing 8 ft. to 10 ft. of water. The berthage space amounts to 1,000 ft., with from 18 ft. to 22 ft. of

water. The principal exports are gold and timber. The number of vessels that entered the port during 1896 was 75; tonnage, 4,992.

Okarito, fifty-five miles south-west of Hokitika: A bar harbour; sometimes completely blocked by a high sand-bank thrown up by heavy seas. When open, the entrance is good, with a maximum depth of 10 ft. There is a small jetty about half a mile from the entrance.

Bruce Bay, ninety-five miles south-west of Hokitika: An open roadstead, well sheltered from the south and south-westerly winds by Heretaniwha Point, which juts out fully a mile to the northward. Good anchorage in 18 ft. of water opposite the Green Rock, which stands up out of the water. Good boat-landing with above winds on a smooth sandy beach.

Paringa River, 104 miles south-west of Hokitika: Open roadstead. Vessels coming in and out should give Hauata Reef (off the north head) a wide berth. There is also a sunken reef, awash at low water, in the middle of the bay, and a dangerous sunken rock just off the south head, two or three chains away, facing a small sandy bay, and right abreast of the trig. station. Vessels lie inside and a little to the northward of this rock, about a quarter of a mile from shore, and are quite safe with southerly winds.

Haast River, 118 miles south-west of Hokitika: A constantly-shifting bar at entrance, which is nearly opposite and a little to the southward of the Alhambra Rock. This rock stands well out of the water, and vessels entering can go on either side with safety. Average depth of water on bar from 6 ft. to 8 ft.

Okuru and Turnbull Rivers, 138 miles south-west of Hokitika: These rivers join just inside the entrance. Good, straight channel; average depth, 8 ft. to 10 ft. The port is well sheltered by Open Bay Islands, which lie about three miles away, just opposite the entrance, bearing a trifle west of north. A dangerous reef lies about two miles and a half from the south-west point of the smaller island, and immediately to the north-west of a line drawn from the last-named point to the extreme end of Jackson's Head.

Jackson's Bay, 153 miles south-west of Hokitika: Good shelter and anchorage, open only to north-east, with 12 ft. of water within a few chains of shore. Jackson's Head runs out about one mile and a half in a north-easterly direction from the southern end of the bay. This is the only ocean harbour on the coast of Westland, and could be converted into a first-class port at comparatively small cost. No doubt Jackson's Bay will eventually form a great coal port, as indications of coal are found from the bay to Tauperikaka, a distance of thirty miles. Moreover, the recent discovery of a practicable pass through the main range, *viâ* the Waiatoto and Axius Rivers, will make it in the near future the natural outlet for the Lake Wanaka country.

Big, or Awarua Bay, 200 miles south-west of Hokitika: At the extreme south-west corner of Westland. An open roadstead, sheltered from east and south-west winds; 24 ft. of water on south side anchorage and 30 ft. on north side, just opposite Crayfish Rock, in a spot sheltered from northerly winds.

Steamers have also, in past years, entered the Teremakau, Waitaha, Wataroa, Wanganui, Waiatoto, and Arawata Rivers, all of which have bar-entrances. The Cascade River is likewise navigable, though no steamer has as yet been in; and goods and passengers are also landed at the roadsteads of Saltwater, Gillespie's Beach, and Abbey Rocks.

Towns.

Brunnerton: A borough of about 1,632 inhabitants; is a coal-mining centre. Coke and fire-clay bricks are also manufactured. Railway communication with Greymouth Port, Reefton, and Upper Teremakau.

Greymouth Borough: Population, 3,099; the shipping port for Grey Valley. Railway communication with Reefton, Upper Teremakau, and Hokitika. Railway workshops, foundry, and quarries. The principal business portion of town is built on Native land, rents being paid to the Public Trustee, who distributes them to Natives entitled thereto.

Kumara: Borough, of 1,149 inhabitants. This is a brisk mining town, and is probably the largest hydraulic-sluicing mining centre in New Zealand. It has two suburbs—Dillmanstown and Larrikin's—with populations of 467 and 162 respectively.

Hokitika: Borough, of 2,059 inhabitants. This is a pretty town, the political capital of Westland, the port for shipping and centre of supply for a number of little townships, and for the whole district south of Teremakau.

Ross: Borough, population 727. A clean and neat little town, the centre of a considerable mining district, with a few good sluicing claims on a large scale.

In addition to the above, there are several small mining centres, such as Stafford, Kanieri, Woodstock, Rimu, Blue Spur, Okarito, and Gillespie's.

Mining and Minerals.

The District of Westland contains the greatest area of alluvial auriferous ground on the West Coast. In the Mines Report of 1896 the number of miners employed was given as 2,365, and the amount of gold produced as 49,893 oz., valued at £199,626.

All the Westland rivers carry more or less gold, but the two great golden rivers are the Arahura and Waiho, the bars and ripples in which appear to be replenished with fresh deposits of gold after each flood. Standing on the summit of Mount Turiwhate, the ancient beds of the Arahura can be easily traced northward to the Kumara and southward to the Rimu diggings. Similarly the Waiho has, in olden times, flowed both northward down the course of the Okarito River and southward to the Omoeroa River, the lateral terraces in both directions being well defined and gold-bearing.

There are three main gold-bearing deposits in Westland: the first, which may be called riverine leads, run generally westward. These are ancient river-beds, often lying at considerable elevations, of which the bulk has been washed away, leaving detached portions, as at Kumara and Rimu; the second are beach leads, both those along the present coast-line, and others running parallel thereto at distances varying from one-quarter to four miles inland, and at levels from a few feet below to a couple of hundred feet above sea-level; the third are extensive masses of gravel, &c., occurring in large isolated patches, as at Big Dam Hill, Humphrey's Gully, and Bald Hill, north of the Haast. These drifts have all one notable peculiarity, viz., that they invariably coat the seaward faces of the hills, and neither gold nor drift is to be found on the inland slopes. Gold-bearing fans from Mount Greenland have been found at different levels on Ross Flat, having probably been deposited in deep water by sucessive land-slides.

Hydraulic sluicing on a large scale is successfully carried on in various portions of the northern district, and is rapidly being extended to many other localities. Kanieri Lake is being re-utilised, and an abundant quantity of water is now available for the sluicers in the Kanieri Valley. The extension, now proposed, of that race to Back Creek would develop a very large field. The tapping of the Arahura River will, when completed, enable the miners at Blue Spur to obtain an unfailing supply of water, and command a large area of auriferous country, at present unworkable from want of water at a sufficient altitude. Numerous and costly experiments have been made with dredges of different types in the endeavour to work economically the gold-bearing sands which lie along the sea-beaches for a distance of over 140 miles; but none have proved a success as yet. A considerable number of miners (black-sanders) work on some of these beaches, and seem to make a fair living, many of them having been so employed in one neighbourhood for over twenty years.

Gold-bearing quartz has been found throughout the district, the most promising finds being at Taipo Range, Browning's Pass, and Cedar Creek, where extensive and costly prospecting is now in progress. Silver ores, associated with gold, have also been found, notably at Rangitoto, where a systematic and expensive search is being continued for the main lode. Copper lodes have also been discovered throughout the country, the finest outcrop being on the western slopes of the Matakitaki Range, with good seams and beds of coal and limestone adjacent.

THE CANTERBURY LAND DISTRICT.

SIDNEY WEETMAN, Chief Surveyor.

Boundaries—Physical Features

The Land District of Canterbury comprises the central portion of the Middle Island, and is bounded towards the north by the Hurunui River, with an extension northward to the Waiau-ua River for about twelve miles from the sea; towards the westward by the summit of the Southern Alps to Mount Aspiring; thence towards the south by a right line and by the Ohau and Waitaki Rivers to the sea; and towards the east by the South Pacific Ocean. It lies between south latitudes 42° 45′ and 44° 55′, and east longitudes 168° 50′ and 173° 20′. The length of the district north-east and south-west is about 190 miles; the breadth W.N.W. and E.S.E., from the summit of the Alps to the sea, averages seventy miles. The sea-board has a length of about 240 miles, consisting generally of low-lying beaches, broken by the projection eastward of Banks Peninsula, which contains the only large natural harbours. That portion of the district which fronts the ocean between the Ashley and Opihi Rivers is flat land, about 2,500,000 acres in extent; north and south of those limits the plain is interspersed with undulating and hilly country.

This great plain stretches westwards, rising and merging into downs and hills, which again extend westward and merge into the Southern Alps and the offshoots therefrom. Banks Peninsula, which has an area of about 250,000 acres, is wholly composed of ridges and hills, deeply intersected by basins and gullies, the result of volcanic action.

The Southern Alps, which form the backbone of the island, are a continuous chain of mountains, with a succession of magnificent peaks, attaining their culminating point in Mount Cook, or Aorangi, 12,349 ft. above sea-level; there are, besides, numerous peaks ranging in altitude between 7,000 ft. and 10,000 ft. Offshoots, extending to great distances eastward and south-eastward from the main range, attain elevations of 6,000 ft. to 9,000 ft. On these mountain-ranges are numerous and extensive glaciers, from which emanates the river-system of the district, comprising the Hurunui, about 85 miles in length; Waimakariri, 90 miles; Rakaia, 85 miles; Ashburton, 64 miles; Rangitata, 74 miles: the Waitaki and its main feeders, 140 miles. These rivers rush down from the mountain-gorges, through the intervening ranges and hills, and traverse the plains to the sea. The channels on the plains are shallow, and extend in some instances over a mile in width.

These rivers serve as outlets for a portion of the Lake system of the Middle Island, Lake Sumner being connected with the Hurunui, Lakes Coleridge and Heron with the Rakaia, and the Mackenzie Country lakes—Tekapo, Pukaki, and Ohau—with the Waitaki. Another important lake is that known as Lake Ellesmere, west of Banks Peninsula; it is separated from the ocean by a narrow shingle-spit only 5 chains across at one point, through which, at certain seasons, the flood waters force a channel to the sea.

Climate.

The climate of Canterbury is well suited to Europeans. It resembles that of Great Britain, but on the plains is far more equable, the mean daily range of temperature being 17·10° Fahr. Observations taken at Lincoln (fourteen miles from Christchurch) for a period of ten years, ending December, 1892, give the following results: Barometer, reduced to 32° Fahr. and sea-level, 30·06 in.; mean maximum daily temperature, 61·47°; mean minimum daily temperature, 43·27°; mean average temperature, 52·37°. The extremes of temperature were 92° and 22° Fahr. The rainfall for the same period averaged 26·809 in. per annum, the extremes being 35·287 in. in 1886 and 14·836 in. in 1890. The average annual number of days on which rain fell was 123, the extremes being 149 in 1887 and 98 in 1891. Snowfalls are very light on the plains, but in the high uplands the climate is much colder and more severe. The changes of weather and temperature are sudden, calms and gales, rain and sunshine, heat and cold alternating. The prevailing winds are north-east, south-west, and north-west—the last a hot wind. The climate, as a whole, is splendidly healthy, bracing, and most enjoyable.

Foundation and Settlement.

The district was occupied, in the first instance, by settlers sent out by the Canterbury Association, which was formed in 1848, and incorporated by Royal Charter in 1849, under the auspices of prominent men in England, including the Archbishop of Canterbury and Lord Lyttelton. The step was not taken until after due inquiry as to the most suitable part in which to establish a settlement. Captain (now Sir George) Grey, at that time Governor, recommended the Wairarapa, but it was finally decided to take over from the New Zealand Company a tract of the Canterbury Plains, in the neighbourhood of Port Cooper. Captain Thomas, the agent of the association, who had advised the selection, superintended the surveys and the preparations for receiving intending settlers. The original intention of the founders was that the settlement should be independent and complete in itself, and should embrace only such persons as were members of the Church of England and were approved of by the association. This was frustrated by the influx of numbers of persons of all classes and beliefs. The first body of emigrants arrived at Port Cooper on the 16th December, 1850, and the settlement remained under the control of the association, as directed by a committee of management in England, and under the active personal supervision of Mr. John Robert Godley, until 1853, when the whole of Canterbury became a province of New Zealand by the provisions of "The Constitution Act, 1852."

Thenceforward the control of the settlement was vested in the Superintendent and the Provincial Council. The first Superintendent was Mr. James Edward FitzGerald, who held office till 1857; he was followed in succession by Mr. William Sefton Moorhouse, 1857–1863; Mr. Samuel Bealey, 1863–1866; Mr. Moorhouse again till 1868; and Mr. William Rolleston till the abolition of the provinces in 1876, when the district came directly under the control of the General Government.

Internal Communication.

In no part of New Zealand are the means of communication better than in Canterbury. The natural facilities of the country have been abundantly supplemented by railways and roads. Lyttelton, the chief port, is connected by rail with Christchurch, the heart and centre of the whole district. From Christchurch the main line extends northwards to Culverden, striking the Hurunui River at a distance of 57 miles; southward the main trunk line runs to Waitaki, 138¾ miles. These lines tap and serve the whole coastal district, and the lands adjoining on the western side. As feeders to these trunk lines, eight branch lines have been constructed westward, and two lines south-eastward; the former, in most instances, extending to the foot of the hills.

Combined with the railway system is a complete network of main, district, and subsidiary roads, extending into all parts of Canterbury. The total length of railways is 455 miles, and the roads probably exceed 10,000 miles in the aggregate. The completion of this splendid system is due, partly to the foresight of the original settlers, partly to the exertions of the Provincial Government, and partly to the railway and public-works policy of Sir Julius Vogel.

Geological Formation.

According to Sir James Hector, the main western ranges are composed of Upper Palæozoic rocks, having at their base extensive plains of Tertiary fluviatile formation, with occasional protruding ridges of Upper Mesozoic, forming low mountain-ranges subordinate to the main axis. Banks Peninsula consists of basic volcanic rocks.

Area, Nature, and Disposition of Lands.

The area of the Canterbury Land District is 8,776,655 acres, of which the estimated area of forest-land is 492,130 acres. Forest-lands are found in Banks Peninsula and in the Mount Peel and Waimate districts, where the timber consists chiefly of rimu, totara and matai; at the sources of the Ashley, Waimakariri, Rakaia, Hopkins, and Hunter Rivers, at Lake Wanaka and near Springfield and Methven, the timber in these localities being mostly native beech; and near Oxford, where the beech is interspersed with rimu, totara, matai, &c.

The lands of Canterbury are classed as follows: First class, 1,840,681 acres; second class, 4,707,173 acres; third class (barren lands and lands of small value), 2,228,801 acres: total, 8,776,655 acres.

The disposition of lands was in 1897 as follows:—	No. of Holders.	Area in Acres
1. Crown lands disposed of for cash (including land granted under Midland Railway Act, 330,414 acres) ...	...	3,443,563
2. Lands held on deferred payments	56	14,980
3. Lands held on perpetual lease	179	18,792
4. Lands held as leaseholds in perpetuity	638	125,998
5. Lands held in occupation with right of purchase ...	16	1,082
6. Lands held as village-homestead special settlements ...	355	11,919
7. Lands held as small grazing-runs	37	76,821
8. Lands held as grazing-farms (on Cheviot Estate) ...	27	44,887
9. Pastoral licenses	94	2,848,777
10. Special-settlement associations	41	4,803
11. Reserves and Crown lands held under temporary occupation licenses (area, 44,944 acres, included in 12 and 16)	340	...
12. Area of land reserved and granted under various Acts (exclusive of Midland Railway land, included in 1) ..	...	483,824
13. Land purchased and disposed of under Land for Settlements Acts (included in 4, 7, 10, and 11; 290 holders, 29,266 acres) ..	..	...
14. Crown lands open for selection	...	63,731
15. Crown lands being prepared for selection*	...	3,429
16. Barren lands, and lands for future disposal	...	1,634,049
Total	...	8,776,655

In explanation, it may be noted that No. 1 comprises the freehold lands conveyed, and that tenants of Nos. 2, 3, and 5 have the right of acquiring the freehold, which is not the case with tenants of Nos. 4, 6, 7, 8, 9, 10, 12, and 13. Crown lands proper are: 14, open for selection; 15, being prepared for selection.

Soils.

The Southern Alps and mountains adjoining are, owing to their great altitude, subject to disintegration, and form for the most part rocky barren wastes.

The lower ranges and hills, the high tablelands, and the light stony portions of the plain form the pastoral areas.

In the northern and southern districts and in the great central plain are the agricultural areas. This latter class of land comprises rich alluvial tracts about Cheviot, Rangiora, Kaiapoi, Lincoln, Ellesmere, Longbeach, Temuka, and Waimate, and the splendid plain- and down-lands which extend from Cheviot to the Waitaki.

Banks Peninsula, where the soil is of a rich volcanic nature, though exceedingly hilly, has alluvial areas in the valleys and about the bays.

Pasturage and Crops.

Below a certain level, the mountainous and hilly regions, and the high upland country in the western and northern part, are covered by native grasses, with an admixture of English forage-plants where the character of the soil and other circumstances are favourable.

The pasturage, which is very suitable for sheep-farming, is taken full advantage of by the pastoral tenants of the Crown, and is used to some extent by freeholders. The light stony portions of the plain also contain native grass lands, well adapted to merino sheep.

The lower hills, downs, and better kinds of plain-country have been widely cultivated, and have proved well fitted for the production both of cereals and of grasses.

* Exclusive of 30,682 acres of lands acquired for settlements.

The chief crops grown are wheat, oats, barley, turnips, rape, clover- and grass-seed; while amongst other crops produced are maize, rye, peas, and beans.

Of the cereals, wheat is the most largely grown, and was for many years a large item of export. In the season 1896-97 the area under crop was 174,579 acres, estimated to yield an average of 21 bushels per acre, or 3,666,159 bushels in all, equal to nearly two-thirds of the whole yield for the colony.

Oats also are very successfully grown, the figures for the same period being 130,113 acres, estimated to yield 3,122,712 bushels; or an average of 24 bushels per acre, or nearly one-third of the total yield for the colony.

Barley of superior quality is also produced, the figures being 10,929 acres, 327,870 bushels: average per acre, 30 bushels, or over two-thirds of total yield. Grass-seeds are abundantly grown, cocksfoot mainly on the splendid Banks Peninsula country, and rye throughout the land district.

Hay was grown on 49,661 acres.

Root-crops.

Potatoes, which yield crops of excellent quality, were grown in 1896-97 on 7,781 acres; turnips and rape were grown on 167,042 acres, and the combined area of other crops grown, including rye, peas, beans, mangolds, beet, carrots, and onions, was 15,219 acres. The area of oats for green fodder and hay was 52,723 acres. The area ploughed and laid down in English grasses was 1,531,011 acres. Surface-sown lands comprised 431,945 acres. The total area under crop was 582,844 acres, and the area broken up but not in crop, 10,292 acres.

Stock.

The pastoral and agricultural lands provide grazing and fodder for a large number of sheep, cattle, horses, and other stock. Of late years the value of the plains has been much enhanced and the carrying-capacity thereof greatly increased by the water-race system, which supplies water throughout the length and breadth of the dry areas, and enables the country to be occupied in smaller holdings than would otherwise be possible.

The following table shows the extent, cost, and other particulars regarding the water-race system in the several counties in 1897:—

County.	Area watered.	Miles of Races.	Total Cost.	Cost per Acre watered.	Amount of Water distributed every Twenty-four Hours.	Annual Charge for Use of Water.
	Acres.		£	s. d.	Gal.	
Selwyn ...	326,388	1,084	67,679	4 1¾	70,940,960	8s. 4d. to £1 5s. per 100 acres.
Ashburton	586,000	1,170	27,500	0 11¼	78,000,000	About £3 per mile of race.
Geraldine	71,212	260	9,010	2 6½	29,520,000	About 7d. per acre, including a rate for payment of principal and interest on loans, and a rate for maintenance.
Waimate	28,000	130	5,990	4 3	7,200,000	Races are maintained by a small rate on the annual value of lands watered.

The sheep in the Provincial District of Canterbury, in April, 1896, numbered 4,301,300. In November, 1896, there were 45,782 horses, 94,930 cattle, and 46,034 pigs.

The district has a well-deserved reputation for the classes and splendid quality of its sheep. On the mountains and higher lands the merino still predominates;

but on the richer low-lying ranges, hills, and plains the prevailing types are crosses between the merino and Leicester, Lincoln, Romney Marsh, and other breeds. In proof of the superior character of the flocks, pasturage, and climatic conditions in the Middle Island, the following percentages of lambing returns are quoted—these are "fair average returns, but much higher might have been exhibited": Mountain native pasture—pure merino, 75·36; pure merino and Border Leicester, 88·94: English-grass pasture—crossbred and Border Leicester, 80·8; half-bred Border Leicester, 82·79; Border Leicester, 90·77; Lincoln, 88·08; Romney Marsh, 111·46; English Leicester, 93·34; Shropshire, 97·41; Southdowns, 96·87. It must be borne in mind that the flocks and herds are supported by the natural and artificial pastures without housing.

Owing to the development of the frozen-meat trade a great impetus has been given to sheep-breeding. The bulk of the primest meat exported from the colony is supplied by this district, with Marlborough, and commands the highest price in the London markets. In the year 1896 the number of carcases frozen was 609,350, of the value of about £358,000, being over two-fifths of the total output of the colony in this line. Large quantities of preserved meat, tallow, bonedust, neatsfoot- and trotter-oil, are also produced annually.

The total quantity of frozen meat exported from Canterbury during the year ended 31st March, 1897, was 484,103 cwt., valued at £566,075. At Belfast, Islington, and Timaru, freezing-works are established, each containing a complete plant for carrying on the industry, as well as departments for curing, preserving, boiling-down, tallow rendering, fellmongering, and the manufacture of manures. The Belfast Company have at their command steam-power equal to 500 horse-power, and employ about 220 men. They have storage for 26,000 sheep, and can put through 3,000 a day. The Islington and Timaru works, which are owned by the Christchurch Meat Company, employ from 250 to 300 men. The former can put through 2,000 sheep and 1,000 pigs per diem, and have storage for 36,000 carcases. The latter can deal with 1,000 sheep in a day. At Hornby there has recently been established by Messrs. Nelson Brothers (Limited) a well-equipped factory for freezing only, with engines of 300 horse-power, and a capacity of dealing with 1,000 sheep per diem. The factory has storage room for 50,000 sheep.

Wool.

During the year ended 31st March, 1897, there were shipped at Lyttelton and Timaru 29,686,765 lb. wool, valued at £1,022,888; and to this must be added the amount (about 1,000,000 lb.), bought for manufacture by the woollen-mills in the district. The staple of the New Zealand wool, especially the long-wool and crossbred, is remarkable for its freedom from breaks and other imperfections. The average clips are approximately as follows: Merino, 4 lb. to 7 lb.; quarter-breds, 6½ lb.; half-breds, 7½ lb.; three-quarters, 8½ lb.; Leicesters, 10½ lb.; Lincoln, 11 lb. From special flocks clips up to 25 lb. and 30 lb. are obtained.

Butter and Cheese.

Banks Peninsula and the rich tracts of country previously mentioned are excellently suited for dairy farming. The pasturage and climatic conditions are favourable, and a great increase in the production of butter and cheese may be looked for, more especially as housing and hand-feeding are in some districts unnecessary. A central co-operative dairy factory has been established at Addington, served by twelve creameries, situate at Marshlands, Oxford, Halswell, Springston, Doyleston, Little River, Ladbrooks, Lakeside, Kaiapoi, Green Park, Brookside, and Ashburton, each capable of dealing with the milk of 1,000 cows. There are also very complete dairy factories at Taitapu, Sefton, Temuka, Southbrook, Belfast, Tinwald, and Le Bon's Bay, as well as a cheese factory at Flemington.

In 1895 the production of butter at the Canterbury factories alone amounted to 1,213,942 lb., and of cheese to 582,400 lb.

Timber.

The sawmilling industry finds its development chiefly in the Oxford, Little River, Mount Somers, and Waimate districts. The number of mills in Canterbury in 1896

was twenty-two, employing 232 hands, the horse-power being 318. The output in 1895 was 3,697,230 ft., valued at £17,608. The timber comprises birch, totara, red- and white-pine. The first-named is used chiefly for sleepers and fencing, the totara and pine for building purposes. Including the work done by the planing- and moulding-mills the value of all the manufactures under this head was £26,154.

Fruit.

The district is eminently adapted for the growth of a large variety of fruits, especially all that flourish in Great Britain. Attention has recently been directed to landing supplies of fruit in London; the attempts so far have proved satisfactory, and point to the possibility of a large trade being established.

Coal.

Brown coal is found at the Malvern Hills, Homebush, Whitecliffs, Springfield, Mount Somers, Albury, and various other places. Lignite is also commonly distributed. For the year 1896, the output from 12 colleries, employing about 40 hands, was 11,817 tons, bringing the total amount raised from 16 collieries up to the 31st December, 1896, to 338,632 tons. The seams worked vary from 16 ft. to 2 ft. 3 in., the average width being 8 ft. At Acheron, near Lake Coleridge, a true anthracite is found, the other pits in the district being of brown coal or lignite.

Building-stones.

The building-stones of Canterbury comprise some excellent varieties. The Halswell quarries produce an exceedingly hard and close-grained stone of a dull leaden-grey colour. Granular trachytes are obtained from Governor's Bay, Lyttelton; porphyrites at Malvern Hills; good limestone at Malvern Hills, Waikari, Mount Somers, and various other places; bluestone rock is found at Timaru suitable for millstones. There is abundance of limestone in North Canterbury, Mount Somers, Castle Hill, and various other parts, which is well adapted for making lime.

Fisheries.

Deep-sea fishing is carried on from Lyttelton and Akaroa, the kinds of fish chiefly caught being groper (hapuku), ling, conger, moki, butterfish, barracouta, soles, whiting, red-cod, herrings, guffy, and garfish. From Lake Ellesmere and the river estuaries excellent flounders are obtained. In 1896 there were employed on the lake and along the coast 68 boats, manned by 105 men.

Trout thrive amazingly in the rivers and fresh-water lakes, affording excellent sport.

Manufactories.

Excluding mines and quarries, the total number of manufactories in Canterbury in 1896 was 448, employing 4,944 males and 1,110 females, their annual wages respectively being £376,748 and £34,973; the number of engines 296, of 4,343-horse power.

The total value of manufactures for 1895 was £2,629,822, and the value of land, machinery, and buildings was £1,178,112. Included in the above were 20 printing, 9 agricultural-implement, 27 coach-building and -painting, 29 fellmongering, tanning, currying, and wool-scouring establishments, 5 ship- and boat-building works, 12 sail- and oilskin-factories, 3 woollen-mills, 5 clothing, 17 boot-and-shoe factories, 4 rope-and-twine works, 5 flax-mills, 5 boiling-down, meat-preserving, and freezing works, 14 cheese- and butter-factories, 32 grain-mills, 3 fruit- and jam-making works, 16 breweries, 10 malt-houses, 30 aërated waters and cordial works, 6 sauce- and pickle-making factories, 5 soap- and candle-works, 22 sawmills and sash-and-door factories, 4 gasworks, 15 brick, tile, and pottery manufactories, and 10 iron- and brass-foundries.

Libraries and Churches.

As an indication of the progress of the district, it may be noted that there were in April, 1896, seventy-three public libraries, mechanics' institutes, and scien-

tific institutions, with a membership of 3,647; and 277 churches or chapels, attended by 42,615 persons.

Educational Institutions.

Primary Schools.—The district is divided into two parts, termed North and South Canterbury, each presided over by an Educational Board. Under the control of the Boards schools have been established throughout the whole country wherever population warrants their erection.

The number of children attending the public primary schools in Canterbury, on 31st March, 1897, was 26,758. Average daily attendance, 22,448. Number of teachers—males, 291; females, 387: total, 678. Number of schools, 262.

There is a Normal School at Christchurch for the training of teachers.

Secondary Education.—For the further education of children ample provision has been made by the establishment of secondary schools. The principal schools of this class are the Boys' and Girls' High Schools at Christchurch, Rangiora, Ashburton, Timaru, Waimate, Akaroa, and Temuka. For more advanced students Canterbury College, Christchurch, is available. This institution was founded and endowed by the Provincial Government in 1873. It is presided over by a Board of Governors. The teaching staff comprises eight professors and three lecturers, and the number of students attending lectures is over 300.

It should be recorded here that the Provincial Government of Canterbury was fully alive to its duties as regards higher education. It made reserves for the purpose of endowment for the following objects: (1) College, 101,640 acres, reserved June, 1873; (2) technical science, 103,000 acres, reserved July, 1873; (3) School of Agriculture, 100,950 acres, reserved June, 1873; (4) Boys' High School, 9,220 acres, reserved at various dates; (5) Classical School, 8,953 acres, reserved at various dates. To these were subsequently added the following: (6) Girls' High School, 2,578 acres, reserved January, 1878; (7) Medical School, 5,000 acres, reserved December, 1877.

Primary Schools.—There are numerous private schools, independent of the State, the chief amongst them being Christ's College, Christchurch, connected with the Church of England. The Roman Catholics support schools of their own in Christchurch, Lyttelton, Timaru, Addington, Papanui, Halswell, Ashburton, Arowhenua, and Waimate. There are besides, in Christchurch, some excellent private boarding- and day-schools for both boys and girls.

Other Institutions.

Canterbury has the advantage of possessing many flourishing public institutions. The School of Art, Christchurch, was established by the College Governors in 1882; the Art Gallery owes its origin to the Art Society, the site being the gift of the Government. The Canterbury Agricultural College, Lincoln, also founded by the College Governors, is surrounded by 660 acres of land. The commodious buildings, which cost over £20,000, provide accommodation for the Director and teaching-staff, and for forty-five students. The fees are on a low scale. The farm buildings are complete, and include a well-equipped dairy. Instruction is given in agriculture, chemistry, botany, mechanics, physics, surveying, &c.

The Public Library, Christchurch, under the control of the College Governors, contains reading-rooms, a circulating library of 16,842 books, and a reference library of 10,178 volumes. Numbers of magazines and newspapers are provided. The number of subscribers is 1,620, and the average daily attendance between 700 and 800.

The Museum, Christchurch, is a handsome pile of stone buildings; the collections are large and varied. They are separated into two groups: (1) Those from New Zealand; (2) those from foreign countries. In the New Zealand department the skeletons of whales and moas, as well as the collections of shells (tertiary and fossils) and rocks, are specially good; and the Maori collection, exhibited in a Maori house, is also of considerable interest. In the foreign department, the geological, mineralogical, and ethnological collections are the most extensive, but there is also a good illustrative series of Egyptian and Roman antiquities, as well as of the remains of prehistoric man in Europe and America.

This institution owes its origin and success to the foresight, skill, and energy of the late Sir Julius von Haast, and to the munificence of the Provincial Government.

The philanthropic institutions embrace the Christchurch, Akaroa, Ashburton, Timaru, and Waimate Hospitals; the Sunnyside Asylum for the Insane; the Rhodes Convalescent Home; the Memorial Home for the Aged at Woolston; the City Mission and Destitute Men's Home, Christchurch; the Deaf-and-Dumb Asylum at Sumner; the Orphanage, Lyttelton; and the Industrial School at Burnham.

Towns.

Christchurch, the capital city of the Canterbury District, is situated on the plains. It is practically level, laid out in rectangular form, two miles by one mile and a quarter, and is intersected diagonally by a street. The streets are 66 ft. in width. There are numerous open spaces, including the Cathedral Square in the centre, and Cranmer and Latimer Squares. The Avon, a pretty stream, overhung by willows, runs through the town, presenting from all points charming vistas. The city is surprisingly English in its appearance, architecture, and surroundings. The central portion, where stands the Cathedral, Government offices, and other substantial structures, has a handsome, well-built look. Other parts contain fine public buildings, such as the Museum, Canterbury College, High Schools, &c. The whole is admirably set off by Hagley Park, 400 acres in extent, the Domain and Botanical Gardens, 79 acres, Lancaster Park, the Town Belts, and other public and private gardens and plantations. The suburbs can show many handsome houses and beautifully kept grounds.

The city is surrounded by the populous boroughs and districts of Sydenham, St. Albans, Linwood, Papanui, Woolston, &c. The population of the city was at the last census in 1896, 16,964, in 3,400 houses; including the adjacent boroughs and other suburbs the population amounts to 51,330. Tramways connect the city with the suburbs of Addington, Sydenham, and Papanui, and with the seaside villages of New Brighton and Sumner. The city has been drained at considerable expense, the sewage being conveyed three miles and discharged on the sand wastes near the sea. A pure and copious water-supply has been provided by nature, and is obtained by artesian wells. The affairs of the municipality are controlled by the City Council, presided over by the Mayor. Christchurch is the centre of trade and commerce for the North Canterbury agricultural and pastoral country, and the head-quarters of many manufacturing industries, including carriage, boot, and clothing-factories, flour-mills, breweries, meat-preserving and -freezing, biscuit, planing and moulding, bicycle, and other works.

There are large and well-equipped show-grounds at Addington.

Recreation and amusement are provided for by the Theatre Royal and various public halls, the famous Riccarton racecourse, the numerous cricket and football grounds, &c., while boating men have the River Avon and the Heathcote estuary.

Christchurch is connected with the outside world by Port Lyttelton, seven miles distant. The railway-tunnel of 1¼ miles in length, through the Port Hills, is on this line. Christchurch is not only the centre of the splendid Canterbury Plains, but is also one of the chief railway centres of the colony. Addington railway-workshops are extensive and fully equipped.

Lyttelton, the chief port of the district, is situated on the northern shores of the inlet of that name, sometimes called Port Cooper. The surrounding country consists of high precipitous hills, which separate the harbour from Christchurch and the plains; but by the construction of the railway and tunnel the natural difficulties have been overcome, with the result that the whole of the imports and exports of northern and central Canterbury pass through Lyttelton. The origination and accomplishment of this great engineering work is due to the late William Sefton Moorhouse, at that time Superintendent of the Province. The natural advantages of the port have been enhanced by reclamation and harbour-works, which include two breakwaters, 2,010 ft. and 1,400 ft. in length respectively, extending from Officer and Naval Points, enclosing about 107 acres; long lengths of wharf accommodation, 10,041 ft.; a patent slip for ships up to 400 tons; and a splendid graving dock 450 ft.

long, width on top and bottom 82 ft. and 46 ft. respectively, the entrance being 62ft. wide, well equipped with machinery and all requisites for repairs. Ships drawing up to 25 ft. can berth alongside the spacious wharves and sheds. The railway, electric-light, machinery, and appliances are available throughout, which renders loading and unloading practicable both by day and by night. The town nestles on the side of the range, the streets being generally steep, flanked by solid stone buildings; and a background of green spurs and bold rocky faces gives to the whole a charming and picturesque appearance. The water-supply is obtained from artesian wells on the Christchurch side of the hills. To Christchurch there is a bridle-track over the range, and a carriage-road *viâ* Sumner. The harbour is well defended by fortifications and batteries on Ripa Island and the mainland. The population in 1896 was 3,898, with 801 houses.

Timaru, the third town in importance, is situated on the coast and railway-line between Christchurch (100 miles) and Dunedin (131 miles). It has a well-constructed artificial harbour, the port of shipment for the agricultural and pastoral districts of Geraldine, Timaru, and Waimate. The harbour is enclosed by a breakwater built of blocks of concrete; a rubble wall—the North Mole—starts from the shore a quarter of a mile away to the north, and extends easterly to a point 350 ft. from the breakwater. The enclosed space is 50 acres. The town is picturesquely situated on rolling hills overlooking the sea. The streets are irregular, but the public and commercial buildings, churches, and private houses are generally well and handsomely built of stone. The chief industries are meat-freezing, saw-milling, flour-milling, &c. The town has a good high-pressure water-supply, and is connected by well-made roads with the surrounding districts, and by rail with Fairlie, the route to the Mackenzie Country and Mount Cook. The population in 1896 was 3,613, with 744 houses.

Of other towns in Canterbury the following deserve mention: Rangiora, population, 1,869, with 382 houses, twenty miles from Christchurch by northern line of railway, is situated in the centre of a fine farming country, and possesses manufactories, including seven flax-mills, flour-mill, and brewery. The town and neighbourhood are much benefited by plantations.

Kaiapoi, on the Waimakariri, population 1,828, about fourteen miles from Christchurch by the northern railway-line, lies in a rich farming country, rendered pleasing and attractive by the extent and variety of plantations and gardens. There are factories and various industries, including ham- and bacon-curing, saw-mills, brewery, and agricultural-implement works. Here also is the famed Kaiapoi Woollen-mill, which employs 600 hands when trade is brisk. The Waimakariri is navigable for small vessels to the centre of the town.

Ashburton, the newest of the towns, has a population of 2,082, with 380 houses, and is fifty-three miles from Christchurch on the southern trunk line. It is a well-built town, with extensive and beautiful recreation-grounds and gardens. It owes its existence to the settlement of the plains, the surrounding country being well adapted for farming. There are two breweries, a cordial-factory, three flour-mills, gasworks, ironworks, woollen-mill, brickworks, &c.

Geraldine, population 841, is situated on the Waihi River, four miles from Orari Railway-station, about eighty-six miles south-west from Christchurch. It is a neat and pretty town, in a first-class farming district, and has a beautiful park of native forest-trees.

Temuka, eighty-eight miles from Christchurch, on the southern railway-line, is a well-built town, with good agricultural land all round. It possesses three flour-mills, a butter- and cheese-factory, brewery, foundry, fellmongery and paper-mill. There is a beautiful park and domain. The population, with that of Arowhenua, is 1,449 persons.

Waimate, population 1,286, is situated on the Waihao Forks Railway, about four miles from Studholme Junction, some 111 miles from both Christchurch and Dunedin. This town is the centre for an extensive back-country, and a splendid agricultural area. It owes its origin to the sawmill industry of the Waimate bush. Industries: saw-milling, flour-milling, &c.

Akaroa, population 613, situated on the noble harbour of that name, was founded in 1840, in the first instance by the French. It is a quiet, picturesque little place, much patronised by Christchurch residents and others as a summer resort and watering-place. It was here that Captain Stanley hoisted the British flag on 11th August, 1840, when he took possession of the Middle Island on behalf of the Crown, forestalling the French by a few hours only.

THE OTAGO LAND DISTRICT.

J. P. MAITLAND, Chief Surveyor.

Boundaries and Area.

The Otago Land District lies between the 44th and 47th parallels of south latitude, and extends from 167° 20′ to 171° 10′ of east longitude. It is bounded on the north by the Canterbury Land District; on the south-east and south by the ocean; on the west and south by the Waikawa, Mokoreta, Slopedown, Waikaka, Chatton, Wendon, Waikaia, Gap, Rockyside, and Kingston Survey Districts, the western and southern shores of Lake Wakatipu, the Mid-Wakatipu, Mavora, Swinton, Eglinton, Arran, and Doon Survey Districts, and a straight line from the north-east corner of the last-mentioned district to the nearest arm of George Sound, and by George Sound to the ocean; and on the north-west by the ocean to Big Bay.

The district measures about 160 miles from Milford Sound on the west coast to Waikouaiti Bay on the east coast, and the same distance from north to south. Its area is 9,004,800 acres.

Physical Description.

The country generally is mountainous, the highest land being to the north-west, and culminating in Mount Aspiring, 9,960 ft. above the level of the sea.

The west coast mountains are remarkably rugged and grand; and of the thirteen sounds that pierce this coast, three are within the limits of the Otago Land District, the remaining ten being on the west coast of the Southland District. These three are Milford Sound, Bligh Sound, and George Sound. Milford Sound, though only eight miles in length, contains some of the grandest scenery in the world; and fourteen miles inland from its head is the great Sutherland Waterfall, 1,904 ft. high, possibly the highest waterfall known. Bligh Sound is smaller than Milford, and not nearly so interesting; but George Sound is larger, and very picturesque.

A tourist track has been opened from the head of Te Anau Lake to Milford Sound, and a practicable route has also been discovered, and a track formed, from the north-west arm of the middle fiord of Te Anau Lake to the head of George Sound.

Te Anau Track.—A guide works on this track from December to April. He carries a fortnightly mail between Lake Te Anau and Milford Sound, and also meets each trip of the "Tarawera." There is ample accommodation for tourists who wish to make the journey in short stages, as there are huts erected at six different places on the track.

For nearly one hundred miles inland from the west coast the country is very mountainous, but at a distance of sixty or seventy miles from the south-east coast-line it begins to get gradually lower, taking the form of rolling hills and downs along the sea-shore.

Rivers and Lakes.

The largest rivers are the Clutha, Taieri, and Waitaki: the first-named drains Lakes Wakatipu, Wanaka, and Hawea; the last, Lakes Ohau, Pukaki, and Tekapo, in the Canterbury District. Te Anau, the largest lake in the Middle Island, lies

partly in the Otago and partly in the Southland District. The dimensions of these lakes are as follows:—

Lakes.	Length in Miles.	General Breadth in Miles.	Area in Square Miles.	Height above Sea-level in Feet.
Te Anau ...	38	1 to 6	132	694
Wakatipu ...	50	1 to 3¼	114	1,069
Wanaka ..	29	1 to 3	75	928
Hawea ...	19	3	48	1,062
Ohau ...	11	1 to 3	23	1,720
Pukaki ...	11	2½ to 5	31	1,588
Tekapo ...	15	1 to 3½	32½	2,325

These lakes are situated in mountainous country; they are of glacial origin, and all very deep.

The Clutha River is the largest in New Zealand, and is estimated to discharge over 1,000,000 cubic feet per minute. It has a rapid current, but is navigable for small steamers for a distance of forty miles from its mouth. The Waitaki is not a navigable river. For some seventeen miles from its mouth the Taieri River is affected by tides, which run up one branch into Waihola Lake, and up the other branch as far as Greytown.

There is a small steamer on Waihola Lake, and another on the Taieri River at Henley. During the summer season both run excursion trips to the mouth of the river when required. The distance in each case is about eight miles.

Plains.

There are some considerable areas of tolerably level land in the interior, the largest being the Maniototo Plains, the Idaburn, Manuherikia, and Upper Clutha Valleys. Their dimensions are approximately as follows: Maniototo Plains, length, twenty-eight miles; average breadth, ten miles; Idaburn Valley, twenty-five miles by four miles; Manuherikia Valley, thirty-five miles by four miles; Upper Clutha Valley, thirty-three miles by five miles.

The Taieri Plain, nearer the coast, is about the same size as the Idaburn Valley, and is very fertile. Other plains are the Waitaki in the north, the Tokomairiro, the Strath-Taieri, the Tapanui, and the fertile Inch-Clutha, lying between the two branches of the Clutha River, and consisting entirely of alluvial deposit. There is also a good deal of low country, chiefly rolling downs, on the south-west side of the Clutha near the sea.

Forests.

The forest-land lies mostly along the sea-coast, the largest area of bush being Tautuku Forest, about forty miles in length and fifteen miles in breadth. The western part of this forest is in the Southland District. The other principal forest areas are in the following localities, viz.: north of Dunedin, east of the Tapanui mountains, in the upper valley of the Waikaia River, and towards the north-west coast.

The forests of Otago contain a large variety of useful timber, both hard and soft wood; some being suitable for building purposes, while other varieties are highly ornamental, and much prized for cabinet-work.

Building Stones.

Building-stones of good quality are found in various places throughout Otago. The Port Chalmers quarries afford an inexhaustible supply of bluestone, a basaltic stone of great hardness and durability. A hard freestone of excellent quality is found at Waikawa, where there is a large hill of it close to the water's edge. Blocks of very great size can be obtained. A soft white building-stone—the well-known

Oamaru limestone—is found in large quantities along the railway-line near Oamaru, from whence a good deal is exported to other parts of New Zealand, and to the neighbouring colonies. A similar kind of stone is found at Otekaike, about two miles from the railway-station, and it may be interesting to note that during the years 1891–93 about 3,000 tons of stone were sent from the Otekaike quarries to form the facings of the Melbourne Fish-market.

Coal.

No first-class coals have yet been discovered in Otago suitable for steamships making long voyages, but very excellent brown coal exists in various neighbourhoods, and is used on the railways in large quantities. There are seventy-two coal-mines at work in Otago, in twenty-two different places, furnishing very good fuel for household and domestic purposes. The output for 1896 was 237,615 tons. Beds of lignite are also found in numerous localities, chiefly round the margins of the old lake-basins, and along the courses of the older river-valleys.

Limestone.

Limestone is found in the following places: Oamaru, Otekaike, Otepopo, Waihemo, Maniototo Plains, Waikouaiti, Lower Harbour, Peninsula, Waihola, Millburn, and Wakatipu.

The Millburn Lime and Cement Company burn large quantities of lime at their Millburn works, from whence it is sent to all parts of Otago, for building purposes, gasworks, &c. It is also largely used in farming, and the productiveness of the Tokomairiro Plain has been greatly increased of late years by its application to the soil. Large cement-works belonging to the same company have been open for some years on the reclaimed land in Otago Harbour, near Dunedin. The cement manufactured at these works is considered fully equal, if not superior, to the best imported, and is largely used in building and other constructive works.

Climate.

The climate of Otago varies greatly in different neighbourhoods, and sometimes a distance of a few miles only separates districts very dissimilar in this respect. A large area in the interior of Otago has what may be called a dry climate. This area includes the Maniototo Plains, the Idaburn and Manuherikia Valleys, and extends to Lakes Wakatipu, Wanaka, Hawea, and Ohau on the west and north, and to the Waitaki River on the north-east. From Oamaru the direction would be across country to the Lammerlaw Ranges, and thence to Mount Benger and the southern end of Lake Wakatipu. This part of the country is well adapted for sheep of all kinds, especially merinos. Some of the runs in the hilly country are capable of carrying 20,000 sheep.

West Coast.

In marked contrast to central Otago is the West Coast District, which may be described as having a wet climate. Not that the number of wet days in the year is very great, but it is subject to very heavy rains from the north-west, the fall generally exceeding 100 in. per annum. But, although wet, the climate is mild, and the vegetation is consequently luxuriant. The only settlers of this part of the country are Mr. and Mrs. Sutherland, who keep a house of accommodation for tourists at the head of Milford Sound. There are very few visitors to the Sounds during winter, but in summer the tourist traffic is considerable. Towards the south-east and south coasts of the district the climate is moist, being somewhat similar to that of Dunedin, where the average rainfall is 35 in., distributed over 163 days in the year.

Fruit.

There are some fine fruit-growing districts in the valley of the Clutha, from below Roxburgh right up to Lake Wanaka. The summers are dry and warm, and the soil suitable. Apricots, peaches, &c., come to maturity fully a month before they do at Dunedin, and grapes ripen in the open air. There is a great future for this neighbourhood in the growing of those varieties of fruit which agree with and

thrive in a dry climate. The grape might be cultivated either for wine-making or for the table, and some varieties could be made into good raisins. The hops grown at Alexandra are far superior to any grown in other parts of the colony, and quite equal to the best Californian. The dryness of the atmosphere is favourable for preserving all kinds of fruit, while the Otago Central Railway will bring the neighbourhood into direct communication with a market.

Crops.

Cereals of all kinds do very well over nearly the whole of the provincial district, which includes Southland. The following are the agricultural statistics:—

Total area under cultivation (Otago Provincial District) on 31st March, 1897: Land broken up but not planted, 31,313 acres; land under crop, 281,949 acres in corn, and 275,574 acres in green and other crops; land broken up and grassed, 1,360,243 acres; land grass-sown without being previously ploughed, 264,342 acres; land in garden, 3,982 acres; land in orchard, 2,003 acres; land in plantation, 4,674 acres: giving a total of 2,224,080 acres in cultivation.

	Acres.	Yield per Acre.	Total.
Wheat ...	58,307	29 bushels	1,690,903 bushels.
Oats ...	194,273	35 ,,	6,799,555 ,,
Barley ...	7,552	29 ,,	219, 008 ,,
Rye ...	1,801	20 ,,	36,020 ,,

Stock.

The total number of sheep in the Otago Provincial District, including Southland, on the 30th April, 1896, was 3,995,496, of which rather more than two-fifths were merinos. On an average, about one-third of the flocks consist of breeding-ewes. The shearing is mostly done by hand, but the Wolseley shearing-machines have been introduced on about ten stations, the number of machines in each wool-shed varying generally from ten to fifteen, though there is one shed at Benmore, near Lake Ohau, where there are twenty-eight machines driven by a turbine.

In November last there were 53,076 horses; 57 mules and asses; 185,109 cattle; and 28,048 pigs.

The rabbit-pest is still a severe tax on the stockowners; the number of skins exported last year for the whole colony being 10,828,612, nearly the whole of which came from Otago.

Freezing Establishments.

There are nine meat-freezing and preserving-works in Otago. The principal freezing establishments are at Oamaru, at Burnside, and at Port Chalmers. At Oamaru there are two Bell-Coleman machines. The capacity of the smaller one is 60,000 cubic feet of cold air per hour; and the larger one can supply 90,000 cubic feet per hour. The smaller machine is driven by water, obtained from the Oamaru town supply, the larger by steam. Together they can freeze 800 sheep a day, and there is storage-room for 20,000 carcases. At Burnside there are two Haslam machines, both driven by steam. One can supply 40,000 cubic feet of cold air per hour, and the other 60,000. The Burnside works can freeze 500 sheep a day, and have storage-room for 14,000 carcases. The Port Chalmers freezing-works, erected last year by the Otago Dock Trust, cost £4,500. They are used principally for the storage of butter prior to shipment, but the freezing-chambers have also been used for sheep, rabbits, and fish. The refrigerating machinery includes a 12-ton Hercules refrigerator. The capacity of the building is 30,000 cubic feet, and 50 tons of butter can be handled per week.

Woollen-mills.

There are four woollen-mills at work in Otago, employing some 780 hands. The amount paid in wages is about £50,000 per annum, and the machinery is 750-horse power. £64,000 worth of wool and other materials are used per annum, and

the turn-out of manufactured goods exceeds £140,000 yearly. The woollen industry in Otago is of greater magnitude than in any other district of New Zealand.

Clothing-factories.

In clothing-factories, also, Otago takes a prominent place, having nine, employing 700 hands, whose wages amount to £28,000 per annum.

Dairy-factories.

Otago takes also a good position as regards cheese- and butter-factories and creameries, whether in respect of the number of hands employed, wages paid, or the value of the annual output, which amounts to about £93,875. In April, 1896, there were forty-four factories, and new ones are being started from time to time. From Port Chalmers this year were shipped 1,627 tons of cheese, and 159 tons of butter.

Gold Production.

Otago produces about one-third of all the gold taken out in New Zealand. The quantity of gold obtained last year amounted to 88,362 oz., having a value of £359,991. Number of Europeans engaged, 3,885; and number of Chinese, 964.

Gold is found very generally distributed throughout Otago, except in the southern portion of the district. The principal localities are: Clutha Valley, Tuapeka, Shotover, Cardrona, Tinker's, St. Bathan's, Mount Ida, Nevis, Bannockburn, and Maerewhenua.

Chief Towns.

The following are the chief towns of Otago, with their population as on the 12th April, 1896, including all having 1,000 inhabitants and upwards: Dunedin, and suburbs, 47,280; Oamaru, 5,225; Port Chalmers, 2,084, shipping included; Mosgiel, 1,382; Milton, 1,139; Kaitangata, 1,362; Lawrence, 996.

City of Dunedin.

Dunedin, the capital city of Otago, is situated at the head of Otago Harbour, which is divided into two parts—the upper and lower. The lower harbour is six miles long from Taiaroa Heads to Port Chalmers. The upper harbour, from Port Chalmers to Dunedin, is seven miles in length. Dunedin and Port Chalmers are also connected by railway.

Although the hills surrounding Dunedin are rather tame in character and outline, the city itself is picturesquely situated. The business part of it is on level land near the harbour, and the residences occupy the sloping hills which rise on the west side of the city. The city proper is about two miles and a half long by seven-eighths of a mile wide, and is bounded on the land side by what is called the Town Belt. This reserve averages one-fifth of a mile in width, and comprises 500 acres, a great part of which is virgin bush. A pretty road, called the Queen's Drive, has been laid out through the Belt from end to end, from which many fine views of the town and harbour can be obtained.

It is thirteen miles down the harbour to the Heads in a north-easterly direction, but the Ocean Beach, lying to the south-east, is only two miles from the centre of the city, and the favourite seaside resort—St. Clair—is about three miles. Trams run to both these places at short intervals. The city is also connected with the suburban boroughs, lying on the hills overlooking the town, by excellent cable-tramways. The Botanical Gardens to the north of the city are well laid out, the native bush contrasting with the cultivated parts. The Reservoir also, which is within easy walking distance, and the drive to Blueskin Bay, have many beauties.

Dunedin is well supplied with elementary schools, there being six large schools in the city proper, and eight more in the suburbs.

There is also in Dunedin a training-college for teachers. The students in training number eight men and twenty-one women. They devote every fifth week during the session to practice in teaching and management of classes in the ten associated schools of the city and suburbs.

The School of Art and Design is in the same building as the Normal School, and has a staff of four teachers.

The Otago Boys' High School stands on a commanding plateau 300 ft. above the business part of the city and the harbour. The school was opened on the 3rd August, 1863, in the building in Dowling Street now occupied as the Girls' High School. The new buildings were opened by Sir William Jervois, Governor, in February, 1885. The teaching staff, including the Rector, numbers ten; the attendance is 204.

The Otago Girls' High School was opened on the 6th February, 1871, with a roll of 78 pupils. The present attendance is 144, with a teaching staff of eleven. Otago holds the proud distinction of having established the first Girls' High School in the Australasian Colonies. Among the earnest band of workers who laboured to establish this first High School for girls the name of Miss Dalrymple stands pre-eminent, and will ever be held in grateful remembrance by the people of Otago.

The Otago University was founded in 1869, and opened in 1871. It is well housed in a handsome pile of buildings in the domestic Gothic style. There are four separate faculties in the University—viz., arts and science, law, medicine, and mining. The School of Medicine provides the full course for a medical degree of the University of New Zealand. There is a Medical Museum in the University buildings containing anatomical, pathological, and other preparations and models. The teaching staff numbers at present twenty-four professors and lecturers. Of undergraduates keeping terms there are 227—viz., 136 men and 91 women. The University Library contains over 5,000 specially selected volumes, and is open to the public under certain conditions for purposes of reference. The Chemical and Physical Laboratories are well fitted up, and furnished with all necessary instruments and appliances. There are six scholarships tenable at the University, ranging in value from £15 to £40 per annum.

The public Museum, of which the Professor of Biology is Curator, is under the control of the University Council. It is situated in Great King street, about five minutes' walk from the University. There is an art gallery attached, which contains some good works of art. Up to the present time only the central portion of the original design has been erected.

The Dunedin Athenæum and Mechanics' Institute possesses a fine library of over 16,000 volumes, and a membership of over 1,000 subscribers. Besides the Circulating Library there is a Reference Library, and two good reading-rooms, well supplied with newspapers and magazines.

There are some fine specimens of architecture in Dunedin, the buildings for the most part having an air of permanence and solidity. Some of the churches are very handsome, and St. Joseph's Cathedral (Roman Catholic) has a particularly imposing appearance, although only about one-third of the original design has been completed. It is built of stone in the decorated Gothic style. The portion at present constructed will seat 1,000 persons, and has cost £23,000.

The First Church, in Moray Place, and Knox Church, in George street, belong to the Presbyterians, and are both handsome stone structures. The Cargill Monument, which was erected to the memory of the late Captain Cargill, the founder of the Otago settlement, stands in the Triangle, between the Customhouse and the Bank of New Zealand. It is an ornate specimen of early decorated Gothic.

Towns and Surrounding Country.

Port Chalmers (eight miles from Dunedin) situate on Otago Harbour, midway between the Heads and Dunedin, has a population of nearly 2,000 inhabitants. It is the chief port of Otago, and possesses every accommodation for Home vessels, including dry dock, 80-ton sheer-legs, steam-hammer, and other appliances, besides several private foundries, cool-storage chamber, &c. The Port Chalmers graving dock is described in the article on page 58.

Leaving Dunedin by the northern railway, winding in and out through the hills which surround the town, and skirting the precipitous cliffs of the coast-line, the first station of importance reached is Waitati, a favourite seaside resort in Blueskin Bay; distance, seventeen miles. Fifteen miles beyond is Waikouaiti; population,

760; pleasantly situated on the Hawksbury lagoon, the centre of a flourishing farming country. The next place of note is Palmerston, forty-one miles from Dunedin, with 775 inhabitants. A branch-line leaves Palmerston and runs nine miles up Shag Valley to Dunback. Six miles further on the main line there is a branch to Shag Point, a coalfield, with two pits being actively worked.

Oamaru (seventy-eight miles) is the second town in Otago, having a population of 5,225. It is the centre of a large farming district, and has a good harbour, formed by a concrete breakwater, for the reception of ocean-going ships. The chief exports are wool and grain. A branch-line runs from the junction near Oamaru up the Waiareka Valley to Ngapara, seventeen miles, and Tokaraki, twenty-six miles from Oamaru, and another seven miles by road brings us to Livingstone.

Starting from Oamaru, and proceeding to Central Otago, *viâ* the valley of the Waitaki River, the first part of the journey is accomplished by rail across the fertile Papakaio Plains to Awamoko (ninety-six miles), and thence following up the Waitaki River past Duntroon to Kurow (120 miles). At Kurow the traveller leaves the railway and follows the course of the Waitaki through pastoral country to Rugged Ridges Station (133 miles); a little beyond Rugged Ridges the road leaves the Waitaki River, and crossing the Ahuriri Pass (141 miles), strikes the Ahuriri River, which it follows up past Omarama Station (158 miles) to the junction of Longslip Creek; it then ascends this creek until Lindis Pass saddle is reached (172 miles), at a height of 3,185 feet. Here begins the descent to the Clutha Valley *viâ* Morven Hills Station (181 miles) and Tarras Station (200 miles). From Tarras Station the road runs through settled farming country up the Clutha River, which is crossed by means of a punt at Newcastle (219 miles), and four miles more brings the traveller to Pembroke, on the southern shore of Lake Wanaka.

From Dunedin the main trunk railway runs southward to Invercargill, a distance of 130 miles. Passing through the Caversham Borough and tunnel the traveller reaches Burnside (five miles) and Abbotsford (six miles), industrial centres, with coal-mining, tanning, iron-smelting, and other works. Farther on is Wingatui, the junction of the Otago Central Railway; and ten miles from Dunedin is Mosgiel, a rising township with 1,382 inhabitants, noted for its woollen mills. The railway-line now skirts the Taieri Plain, an alluvial flat eighteen miles long by five miles broad; the most fertile portion of Otago. A branch-line from Mosgiel junction runs to Outram (nineteen miles), on the farther side of the Taieri Plain. Passing the smaller Townships of Greytown and Henley, and Lakes Waihola and Waipori, the line strikes Milton (thirty-six miles). Milton, in the middle of the Tokomairiro Plain, is a town of 1,139 inhabitants, with flour-mill, dairy-factories, flax-mill, pottery works, and tannery. The next place of importance is Balclutha (fifty-three miles), on the banks of the Clutha River, with flax-mills, dairy-factories, and chicory works; population about 950. Kaitangata, situated lower down the Clutha River, and connected by a branch-line, has extensive coalfields, and a population of 1,362. Leaving Balclutha, the main line runs through the Clutha downs, passing the small centres of Waitepeka, Warepa, Kaihiku, and Waiwera, and reaches Clinton (seventy-three miles), on the Waiwera stream, a favourite resort of anglers. The next station of note beyond Clinton is Waipahi Junction (eighty-three miles), on the Waipahi River, likewise a favourite fishing-ground. Further on is Gore (ninety-nine miles), on the Mataura River, in the Southland district. Gore is a fast-rising township of over 2,000 inhabitants, with paper-mill, flour-mill, freezing-works, dairy factory, coal-mines, &c.

A branch-line from Waipahi follows up and crosses the Pomahaka River and connects Tapanui (ninety-six miles), Kelso (ninety-eight miles), and Heriot (102 miles).

The Otago Central Railway starts from Wingatui, crosses the Taieri Plain, and then winds round to the Taieri River, which it follows up to the present terminus at Hyde. In its course along the river it runs for some distance through a rocky gorge, but after crossing the Sutton Stream enters Strath-Taieri—a comparatively flat, open country. Near Hindon Station (twenty-five miles), in the Taieri Gorge, and Barewood (thirty-six miles), there are quartz-reefs being worked. In traversing the Strath-Taieri the line passes the Blair-Taieri Village Settlement (forty-four miles), Middlemarch, a rising township (forty-eight miles), and reaches Hyde (sixty-four

miles), the present limit, although the formation is well-advanced as far as Hamilton's. When this section is complete the Maniototo Plain will be tapped, and the extension of the line to Clyde presents no engineering difficulties. Central Otago has a great future before it, as in the opinion of experts it is naturally adapted for producing fruit of all kinds in perfection.

Another means of access to Central Otago is by the Clutha Valley.

Two miles beyond Milton the Lawrence branch leaves Clarkesville Junction, runs up the Tokomairiro River and the gorge of Manuka Creek, and down to Waitahuna (fifty-three miles), and Lawrence (sixty miles), goldmining centres, with an aggregate population of 1,500. Gold was first discovered here in 1861, and the mines are still yielding freely. From Lawrence a coach runs to Beaumont (seventy-two miles), on the Clutha River. Crossing the Beaumont Bridge the road follows the west bank of the Clutha, passing numerous dredging-claims. At eighty-nine miles is Ettrick, and seven miles further on is Roxburgh—the Teviot—(ninety-six miles), a town of 433 inhabitants. Recrossing the Clutha River by the Roxburgh Bridge, and proceeding up the east bank, the traveller reaches Alexandra South (124 miles), at the junction of the Manuherikia River with the Clutha, and Clyde—the Dunstan—(130 miles), the chief town of Vincent County. The next place of importance is Cromwell (143 miles), at the junction of the Kawarau River with the Clutha. Cromwell is a small town of 539 inhabitants, and has a good bridge over the Clutha River. If the traveller wishes to pursue his journey farther he can either follow the road up the Clutha to Newcastle and Pembroke, on Lake Wanaka, or take the Kawarau Gorge road by way of the Crown Terrace to Queenstown, on Lake Wakatipu.

Queenstown, a picturesque township situated on the shores of Lake Wakatipu, has a population of 781, and is the centre of a large gold-mining district. The chief feature of Queenstown is the grand mountain and lake scenery in the neighbourhood, which attracts large numbers of tourists every year. There are two ways of reaching Queenstown—the one by the Clutha Valley and Kawarau Gorge, as above described, and the other by rail to Kingston, at the foot of Lake Wakatipu, and thence by steamer, which runs to suit the trains.

The Tautuku bush, in the south of Otago, has only lately been opened up, but already a large number of settlers are making their homes there. Starting from Balclutha the Catlin's River branch-line runs southwards to Romahapa (sixty miles) on the crossing of the main road to Port Molyneux, thence to Glenomaru (sixty-four miles), and Owaka (seventy miles from Dunedin), is nearly complete. The Catlin's-Waikawa main road is formed the whole way through, as are also numerous district roads, and the adjacent lands are being taken up as fast as they are thrown open.

Railways.

The principal lines are as follows: (1.) The main trunk line from Dunedin to Christchurch, with branches from Oamaru to Hakataramea, forty-three miles; and Oamaru to Ngapara and Tokoraki, twenty-five miles; also, Palmerston to Dunback, nine miles. (2.) The main trunk line, Dunedin to Invercargill, with branches, Mosgiel to Outram, nine miles; Milton to Lawrence, twenty-four miles; Stirling to Kaitangata, five miles; Balclutha to Owaka, eighteen miles; and Waipahi to Heriot, twenty miles. (3.) The Otago Central, from Wingatui to Hyde, fifty-six miles. Rails are laid to Ryan's, seven miles beyond Hyde, and the line is in course of formation to Eweburn.

Statistical.

The total population of the Otago Provincial District at date of last census, 12th April, 1896, was 163,944.

Area of Otago Land District: Open land below 2,000 ft., 5,252 square miles; forest-land below 2,000 ft., 1,919 square miles; open land above 2,000 ft., 6,480 square miles; forest-land above 2,000 ft., 419 square miles; area of lakes, &c., 275 square miles: total, 14,345 square miles.

The following table shows the disposition of the land in the Otago District on 31st March, 1897:—

	Holdings	Acres.
1. Crown lands alienated, comprising freehold land and vested reserves	...	2,674,073
2. Lands held on deferred payment	130	34,672
3. Lands held on perpetual lease	494	91,951
4. Lands held under occupation-with-right-of-purchase clause	100	17,788
5. Lands held on lease in perpetuity	480	132,855
6. Lands held under agricultural lease on goldfields	21	1,010
7. Lands held under Mining Districts Land Occupation Act	65	2,595
8. Lands held under village settlement, deferred payment	7	263
9. Lands held under village settlement, perpetual lease	42	934
10. Lands held under village settlement, lease in perpetuity	112	1,755
11. Lands held under village-homestead special settlement, perpetual lease	87	1,436
12. Lands held by special-settlement associations, lease in perpetuity	15	2,955
13. Lands held as improved-farm settlements	9	10,329
14. Lands held as small grazing-runs	247	489,371
15. Lands held under pastoral license, not including bush	255	4,173,882
16. Lands held under lease and license for miscellaneous purposes, exclusive of gold-mining	335	81,731
17. Lands acquired and disposed of as lease in perpetuity under Land for Settlements Acts	242	23,455
18. Crown lands open for selection (including 2,467 acres under Land for Settlements Act)	...	83,961
19. Crown lands being prepared for selection	...	70,356
20. Land open for application under pastoral licenses	8	80,222
21. Lands held by aboriginal natives	...	16,140
22. Balance of Crown lands, including mining reserves, public reserves not vested, bush-lands, roads, barren country, &c.	...	1,013,066
23. Lakes, and Clutha and Taieri Rivers	...	176,000
Total area of district (14,345 square miles),		9,180,800

Item No. 1 includes 340,517 acres of vested reserves, of which about 26,470 acres have been sold, leaving a balance of 314,047 acres, a portion of which will probably be open for sale at a future date.

Tenants of lands included in 2 and 4 have the right of acquiring the freehold, as have tenants of 3 up to twelve years from the date of issue of the lease, and of 6 in the case of leases issued prior to the Act of 1891. There is no right of acquiring the freehold for tenants of lands included in 5, 11, 12, 14, 15, 16, and 17, and in the case of No. 13 the right of acquiring freehold applies to portions only.

The Crown lands proper are: (18), open for selection (see Crown Lands Guide), 83,961 acres; and (19), being prepared for selection, 70,356 acres.

Local Industries.

There is not space to give in detail particulars of the various local industries throughout Otago and Southland, but amongst others may be noticed the following: There are four bone-mills and artificial-manure factories, where substances that might otherwise go to waste, or pollute the air and water, are turned to profitable account, and made to increase the fertility of the soil. The lime- and cement-works at Dunedin have already been mentioned. There are thirty brick-, tile-, and pottery-manufactories, the largest pottery-works being at Milton, where all kinds of useful household crockeryware are made. Twelve agricultural implement factories are in operation, and turn out annually a large supply. There are fourteen boot- and shoe-factories; six boat-building, eighteen coach-building, twenty-eight fell-mongering, tanning, and wool-scouring establishments; twenty-two aërated-water and cordial manufactories, seventeen breweries, five coffee and spice works, three fruit- and jam-factories, one ink-making establishment, three paper-mills, six rope-

and twine works, one soap- and candle-making establishment, six gasworks, and fifty-one sawmills and door- and sash-making factories. There are also twenty-four foundries, including brass-founders and coppersmiths, beside stove and range manufactories, iron-rolling works, and works for making every description of engineering and mining machinery and appliances; and there is a piano manufactory in Dunedin, which has been open for the last ten years. During that period 210 pianos have been made and about 180 sold. The types manufactured are cottage pianos and upright grands, at prices ranging from thirty to sixty guineas. The present output is from twenty-five to thirty per annum.

Besides the above there are eighteen bacon-curing establishments, eight fish-curing and preserving works, two rabbit preserving works, twenty-three grain-mills, six sugar-boiling and confectionery works, six malt-houses, two colonial wine-making establishments, three sauce and pickle factories, one vinegar works, one glue factory, two boiling-down works, three cooperages, four woodenware factories, six chaff-cutting establishments, one paper bag and box factory, one tobacco-pipe factory, six tinware factories, twenty-nine printing offices, four basket and perambulator factories, two brush and broom factories, one cutlery factory, four cycle factories, two saddlery and harness factories, one portmanteau factory, eight sail and oilskin factories, thirteen furniture factories, four Venetian-blind works, two starch manufactories, four chemical works, one hæmatite paint factory, one sheep-dip factory, one match factory, two flock-mills, three cleaning- and dyeing-works, two waterproof factories, three hat and cap factories, three stocking-weaving factories, one bag and sack factory, seven flaxmills. Also the following, which have been more fully described in preceding paragraphs—namely, nine meat-freezing and -preserving works, four woollen-mills, nine clothing factories, forty-four butter and cheese factories: making a total of 516 industrial establishments, employing 7,055 persons. Approximate value of manufactures yearly, £2,153,473.

THE SOUTHLAND LAND DISTRICT.

D. Barron, Chief Surveyor.

Physical Features.

The Southland District, comprising the Counties of Southland, Wallace, Fiord, and Stewart Island, bounded on the north and east by the Otago District, and on the south and west by the Tasman Sea, may be roughly said to lie between south latitudes 45° and 47° and east longitudes 166° 15′ and 169° 15′. For administrative purposes, however, the Snares, Auckland, Enderby, Campbell, Antipodes, Bounty, and all other islands within the limits of the colony south of the 47° parallel of south latitude are included in it.

Area, Nature, and Disposition of Lands.

The total area of the district, including Stewart Island, but exclusive of Solander, Ruapuke, and the other small islands enumerated above, is 6,966,592 acres, of which 500,000 are covered with bush. The bulk of the bush-land lies between the lakes and the south and west coasts, in the neighbourhood of Forest Hill, Hokonui, Waikawa, &c. The timbers of commercial value are totara, rimu, miro, matai, rata, and kamahi, in mixed bushes; but *Fagus fusca* and other beeches predominate on the high lands between the lakes and the fiords on the west coast.

The open land in its natural state carries tussock and snow-grass, fern, flax, and manuka, &c., and there is a very considerable area of marsh-land, interspersed here and there with peat bogs.

The disposition of the land is as follows:—

	Acres.
Crown lands alienated to date	1,549,145
Lands held on deferred payment	31,820
Lands held on perpetual lease	37,551
Lands held on lease in perpetuity	66,572
Lands held in occupation with right of purchase	21,240
Land held under "The Mining Districts Land Occupation Act, 1894"	1,133
Village-homestead special settlements	633
Improved-farm special settlements	5,145
Small grazing-runs	56,826
Pastoral runs	1,254,792
Endowments and miscellaneous purposes	589,838
Open for selection	267,335
Under preparation for settlement	24,900
Pastoral runs open for lease	1,166,680
Held by aboriginal natives	11,890
Lands of small value not open for sale	527,882
Barren mountain-tops, &c.	1,353,210
Total area	6,966,592

The most striking feature of this district is the number of well-defined rivers and valleys, the latter often widening out to such an extent as to form very extensive plains. Commencing with the eastern side, the Mataura, Oreti (or New River), Aparima (or Jacob's River), and Waiau are the most prominent illustrations of this; but these rivers by no means exhaust the list, as they all have numerous tributaries, which exhibit the same features on a smaller scale.

Speaking generally, the watersheds of these rivers do not attain any great height until followed far inland, and near the great lakes to be presently noticed. From what has been said above it follows that the extensive plains and valleys referred to are of alluvial formation, in many places of very rich and fertile quality, and capable of raising crops of every known product, subject, of course, to climatic limitations. Generally these plains and valleys rise from the river-levels in a very gradual slope, sometimes into a series of terraces from 10ft. to 50ft. in height, and sometimes into undulating hills, intersected at frequent intervals by lateral gullies, affording natural drainage and an abundant supply of water.

These hills are covered with an indigenous growth, consisting of tussock and other grasses, fern, flax, &c., and even in their native state afford excellent grazing for sheep.

Near the large lakes, such as Wakatipu, Te Anau, Manapouri, Hauroto, and others, and between these and the West Coast, the country becomes very high, often reaching 5,000ft. and 6,000ft. above sea-level, with very steep and rugged spurs and ravines, these in most cases being covered with a dense growth of timber, principally of the birch or beech tribe, for two-thirds of their height: the tops, however, often carry tussock and other herbage, affording admirable pasture for sheep in summer; but stock have to be removed from April to October, during which period this country is generally covered with snow.

Southland does not contain so much forest as most of the North Island districts, nevertheless there is a very considerable quantity in the eastern, southern, and western parts, and a large export trade is done in the different kinds of pine and other timbers used for building, engineering, and furniture-making, &c.

From what has been said of the river systems it will be evident that the country is well supplied with water, although none of the rivers can be used for purposes of internal communication; but the plains are traversed by railways for considerable distances from the principal towns, and where the railways end communication is continued by good roads, so that there is probably no part of the colony so well off for means of transit.

Agriculture.

Having already touched on the character of the soil, it only remains to say that the plains, terraces, and lower hills are well adapted for raising wheat, oats, and other cereals, turnips, mangolds, beets, and the various other crops common to temperate climates. Wheat is not so widely grown as it might be, for the reason, probably, that the pastoral branches of farming receive more attention than the agricultural, and wheat is not required for these; whereas oats are largely grown to feed sheep in the form of chaff; turnips also are much cultivated for winter food. Where wheat is grown the yields are very satisfactory, ranging from 40 to 60 bushels per acre, while oats frequently give 80 to 100 bushels.

Linseed is now receiving some attention from farmers, as they find ready sale for it to the manufacturing chemists at remunerative prices, a fair crop yielding over £5 per acre.

Dairy-farming, &c.

Dairy-farming is becoming a very important industry, and is rapidly expanding under the impetus it has received through improved appliances and the favourable state of the Home markets. There are a number of cheese- and butter-factories, and one for preserving milk on the Swiss system. One firm makes Stilton cheese, which is considered to be equal to cheese of the same kind made in England.

Sheep-farming.

By far the most important industries are those connected with the raising and export of mutton and wool. Some years ago sheep-farming was much hindered by the inroads of rabbits; but owing to the repressive measures adopted there has been a marked abatement of the pest, even on high back-country, and thus it has come to pass that country which a few years ago was absolutely denuded of vegetation now shows unmistakable signs of recovery. The hill-country, although it does not carry a large proportion of stock to area, is eminently healthy. The average carrying-capacity over the whole district would probably be under one sheep to the acre. Until within the last few years most of the runs were stocked with merinos, but owing to the decline in price of merino wool, and to the carcase being unacceptable to the European market, these sheep have, generally speaking, been replaced by Leicesters, Lincolns, Romney Marsh, Cheviot, and crossbreds of various kinds, better suited to the existing demands. Large establishments for slaughtering and freezing sheep are at work. The latest of these, erected near the Bluff Harbour, is considered to be the most complete in the colony, being provided with all possible labour-saving machinery and appliances for working up the by-products into articles of commerce.

Coal and Gold.

Extensive seams of coal and lignite are distributed over the district, and in many places the annual output is considerable. Peat is also found in some up-country neighbourhoods, and is used for fuel where wood and coal are scarce. Gold is found all over the district, and a large number of persons are engaged in obtaining it either by sluicing or dredging. A considerable amount of capital has been invested in beach-dredges worked by steam. Not long ago gold-bearing reefs, reported to be of great richness, were discovered at Wilson's River, near Preservation Inlet.

Fish.

Salt-water fish abound in great quantities in the waters surrounding Stewart Island, and oysters are found on banks between that island and the Bluff. All the large rivers, and many of the tributaries, are well stocked with trout, and one river —the Aparima—had salmon-spawn put into it some years ago.

Fruit.

The small English fruits, such as gooseberries, currants, raspberries, strawberries, &c., grow in great profusion, as do also apples. Stone-fruits are not so common, although peaches, nectarines, apricots, &c., do well when trained against nursery-walls in favourable aspects.

Climate.

The climate is bracing in winter, and warm and genial in spring and summer. The old residents state that there has been a marked decrease in the rainfall within the last decade. No regular observations have been recorded for the last few years, but it is believed that the average is about 30in. a year. It may, however, be observed that more rain falls near the coast than inland, and also that the rainfall is more evenly distributed throughout the year than is the case in the northern part of the colony. The temperature varies from 40° in winter to 70° in summer.

Towns.

Invercargill, the chief town, was from the first well laid out with wide streets, and liberal reserves in the town belts for recreation purposes. The Corporation exercises a paternal care in providing water, gas, and in disposing of sewage, &c., for the citizens; and the streets are well lighted, paved, and maintained. Artesian water is pumped to the top of a handsome brick tower—which, by the way, is a very conspicuous landmark—and stored there in a tank, from which most of the houses within the town boundaries are supplied. The population, including suburbs, is nearly 10,000. All religious denominations are represented. There are rope-and-twine, carriage- and implement-factories, flour- and saw-mills, fellmongeries, brick- and pottery-works, iron-foundries, and various other industries. Exceptionally good beer is brewed here, and there are three first-class hotels. The Government Buildings, lately enlarged, are on a scale not often seen in a town of the same size. A clock and chimes of New Zealand make have been placed in the central tower. Although the Bluff is the principal port, Invercargill is provided with a second harbour for smaller vessels, in the New River Estuary, where there is a jetty with appliances for handling and receiving goods within the town boundaries.

The Bluff Harbour, which is connected by rail with Invercargill, does a very large shipping business, and derives additional importance from being the first and last port of call for steamers trading with Victoria and Tasmania.

Next in size to Invercargill is the Town of Gore, situated on the Mataura River, and at the junction of the trunk railway with the Waimea Plains Branch. Owing to this fact, and to the goodness of the land in the neighbourhood, Gore is rapidly growing in size and importance.

Riverton is a pretty little town, about twenty-five miles from Invercargill, with which it is connected by rail, and is situated on the estuary of Aparima or Jacob's River. This is the oldest settlement in Southland, and was a great resort for whalers in former years. The harbour is available for coasting-vessels, but the principal carrying-trade is done by rail. There are several sawmills in the neighbourhood

The Town of Winton is on the Invercargill-Kingston Railway, about twenty miles distant from the latter, and is the centre for a good farming, sawmilling, and coal-mining district.

Lumsden is the junction of the Kingston and Waimea Plains lines. Coaches starting from this place take passengers and mails to the Lake country.

East of Invercargill is Fortrose, on the estuary of Mataura River, which can be entered by coasting-steamers. This place is surrounded by an exceptionally fertile agricultural and pastoral country.

Eastward of Fortrose and about midway between that place and Catlin's River is Waikawa, a newly-settled township with a first-class harbour for coasters, and a very large area of Crown land around it available for settlement. Steamers trading with Dunedin and Invercargill call here and at Fortrose at regular intervals.

Crown Lands for Disposal.

There remains for disposal a very large area of Crown land, probably more than 500,000 acres, but this can be estimated only roughly, because much of the district west of Waiau River is practically unexplored. It is true that this is chiefly forest-land, but it is beginning to be recognised here, as in the North Island, that when such land is once cleared and laid down with grass it is distinctly

superior to most open country for grazing purposes; and grazing is and will long remain the principal industry of the colony. The land referred to lies around Waikawa Harbour, along the Waikawa–Catlin's Road, between the Jacob's and Waiau Rivers, and to the west of the Waiau. Stewart Island also contains a wide extent of Crown lands, mostly forest-clad. There are also considerable areas of open hilly country, carrying natural grasses, still in the hands of Government. These are to be found in various parts of the district, but are being rapidly taken up.

APPENDIX.

EXTRACT from the report for the twelve months ending the 31st March, 1897, on "The Land for Settlements Act, 1894," to the Hon. John McKenzie, Minister of Lands, by James McKerrow, Esq., Chairman of the Board of Land Purchase Commissioners:—

One hundred and forty-eight estates, of a total area of 681,243 acres, were offered during the year. Of that area, about one-third was declined or not recommended, as being unsuitable for close settlement; 75,561 acres were withdrawn shortly after being offered; 300,000 acres are still under consideration; and thirty-one estates, comprising an aggregate area of 71,600 acres, were recommended for purchase at prices fixed by the Board and approved by the Government. Offers to purchase were accordingly made to the owners of these estates, with the result that seventeen accepted, representing a total area of 51,536 acres, at a cost of £251,571.

The actual outlay in the twelve months in the purchase of land was £300,159, for fifteen estates, of a total area of 61,333 acres. The negotiations for the greater part of this land had been well-nigh completed the previous year, although the actual close of the various purchases was made in the year under review.

The total purchases completed up to the 31st March, 1897, since the commencement of the land-purchase system are thirty-eight estates, of a total area of 118,553 acres, costing £520,541. If to that be added seven estates, of an area of 19,902 acres, agreed to be purchased for £103,584 at the above date, the total will be forty-five estates, of an area of 138,455 acres, costing in purchase-money £624,125. The cost of roading, surveying, and administration is £24,111 additional.

It is satisfactory to state that these large transactions have all been negotiated in the ordinary course of buying and selling, without having recourse to the compulsory powers of the Act, with the single exception of the acquisition of the Ardgowan Estate, of 4,241 acres.

The amendment of the Act passed 16th October, 1896, gives the Land Boards somewhat of the power and discretion that would be exercised by a private landlord in similar circumstances, of selecting from the applicants for land those who, from experience and the possession of adequate means, would be most likely to prove satisfactory tenants, and maintain without deterioration the improved lands they are placed in possession of. This power of discrimination reduces very much the chances of the ballot placing valuable lands in the hands of those who, from want of the above qualifications, while doing no good for themselves, would most certainly deteriorate the property of the State.

The other provisions of the Amendment Act which may be noticed are the authority to acquire low-lying lands for homestead-sites for the working of any neighbouring high-lying or high pastoral land, and the acquiring of land for workmen's homes. With regard to procuring homestead-sites, two applications were made to the department to negotiate for suitable land for that purpose, but only in one case was the negotiation successful; in the other the price asked by the owner of the land was higher than the applicant was willing to pay rent on at 5 per cent. on the capital cost, as required by the Act.

Considerable attention has been given to the obtaining of land for workmen's homes, especially in the vicinity of the four principal population centres—viz., Auckland, Wellington, Christchurch, and Dunedin—but so far with little result, the owners of suitable land either refusing to sell, or, if willing, asking prices too high in the opinion of the Land Purchase Board for tenants to pay a rental of 5 per cent. on.

"THE LAND FOR SETTLEMENTS ACT, 1894."

STATEMENT OF LANDS ACQUIRED TO THE 31ST MARCH, 1897.

Name of Estate.	Area.	Purchase-money paid.	Purchase-money to be paid.
	A. R. P.	£ s. d.	£ s. d.
Opouriao	7,604 0 0	24,261 3 3	..
Okauia	5,940 0 0	..	4,138 0 0
Waimarie	430 1 30	8,608 15 0	..
Pouparae	337 3 4	7,768 16 6	..
Elsthorpe	10,073 0 0	45,328 10 0	..
"	220 0 0	550 0 0	..
Raureka	427 2 0	10,260 0 0	..
Paparangi	322 3 32	..	3,875 8 0
Blind River	5,020 0 0	14,678 10 5	..
Omaka	3,898 0 0	10,865 13 6	..
Puhipuhi	320 0 0	..	320 0 0
Poerua	3,230 1 6	3,634 1 6	..
Braco	27 2 0	1,375 0 0	..
Otarakaro	39 3 9	1,990 6 3	..
Highbank	9,119 3 2	59,209 12 7	..
Rakitairi	3,526 1 16	19,362 7 6	..
Waiapi	1,124 2 36	9,553 2 3	..
Albury	19,340 3 38	65,294 11 8	..
Wharenui	73 1 10	4,765 6 3	..
Otaio	376 2 30	4,143 11 3	..
Ashley Gorge	1,166 0 24	4,855 19 6	..
Horsley Down	4,004 1 33	20,022 5 8	..
Kereta	105 2 16	1,584 0 0	..
Epworth	21 0 3	252 4 6	..
Patoa	7,347 0 38	6,612 10 3	..
Omihi Stock Reserve ..	20 0 0	240 0 0	..
Pareora	620 2 13	7,198 14 10	..
Rosebrook	600 1 8	5,984 4 8	..
Orakipaoa	384 0 31	7,683 17 6	..
Kapua	574 1 5	4,594 5 0	..
Studholme Junction ..	107 2 17	1,291 5 6	..
Roimata	48 3 37	2,200 6 7	..
Marawiti	2,028 2 33	..	14,220 18 10
Rural Section 1862 ..	20 0 0	..	60 0 0
Maerewhenua	11,150 3 36	66,905 17 0	..
Puketapu	509 0 6	3,308 14 10	..
Pomahaka	7,462 3 1	18,656 17 10	..
Makareao	2,367 3 31	7,168 3 8	..
"	2,535 3 0	5,071 10 0	..
Tokarahi	11,051 2 9	..	77,360 17 10
Te Anaraki	347 3 18	5,044 0 6	..
Ardgowan	4,241 0 0	34,600 0 0	..
Tahawai	69 0 19	622 1 4	..
Momona	218 2 36	..	3,608 19 3
Merrivale	9,998 0 0	24,995 0 0	..
Forty-five Estates ..	138,454 3 27	520,541 7 1	103,584 3 11

		A. R. P.	£ s. d.
Total purchases ..	Forty-five estates ..	138,454 3 27	624,125 11 0
Total complete ..	Thirty-eight estates ..	118,552 3 37	520,541 7
Total incomplete ..	Seven estates ..	19,901 3 30	103,584 3 11

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STATISTICAL SUMMARY OF THE COLONY OF NEW ZEALAND FOR THE YEARS 1840 TO 1852 (INCLUSIVE).

Year.	Population of European Descent (excluding the Military and their Families.)*	Trade.		Revenue and Expenditure.						
		Imports	Exports.	Revenue from Customs.	Revenue from Land Sales and Crown Lands.	Revenue from Post Office, Fees, Fines, Licenses, and other Incidental Sources.	Total Revenue from Previous Sources.	Parliamentary Grant, or Receipts in aid of Revenue.	Appropriations from the Commissariat Chest for Military and Naval Expenditure.†	Total Expenditure.
	Persons.	£	£	£	£	£	£	£	£	£
1840	2,050	..	..	926	..	..	926	..	..	926
1841	5,000	85,062	10,836	6,407	28,540	2,443	37,390	43,347	804	81,541
1842	10,992	166,783	18,670	18,568	11,723	2,298	32,589	17,494	1,426	51,509
1843	11,848	191,207	53,945	16,241	1,613	3,544	21,398	9,562	8,093	39,053
1844	12,447	111,619	49,647	11,099	405	2,445	13,949	30,815‡	9,782	54,546
1845	12,774	116,980	76,911	8,899	155	3,845	12,899	..	200,000	212,899
1846	13,274	155,478	82,696	21,319	615	4,711	26,645	35,673‡	190,000	252,318
1847	14,477	202,353	45,485	36,472	835	5,958	43,265	37,752	153,038	234,055
1848	17,166	233,844	44,215	38,366	3,337	5,779	47,482	36,000	155,653	239,135
1849	19,543	254,679	133,662	41,931	3,600	4,877	50,408	20,000	151,455	221,863
1850	22,108	..	..	43,612	8,539	7,127	52,298	41,730	131,100	232,128
1851	26,707	..	..	49,208	12,261	5,580	67,049	20,000	110,600	197,649
1852	27,633	..	..	50,527	14,281	10,956	75,764	10,000	91,600	177,364

* The Maori population was estimated at 56,400 persons in the year 1853. † The data are drawn from several official sources, and the information is only approximate. ‡ Raised by debentures at different issues.

The following are particulars respecting the European population, their cultivations, and live stock for the year 1851:—

Religious Denominations.—Church of England, 14,179 persons; Presbyterians, 4,124; Wesleyans, 2,529; Primitive Methodists, 226; Independents, 333; Baptists, 400; Unitarians, 74; Lutherans, 186; Quakers, 8; Protestants not specifically defined, 614; Roman Catholics, 3,473; Jews, 65; refused to state, 496.

Education.—Could not read, 7,818 persons; read only, 4,353; read and write, 14,536.

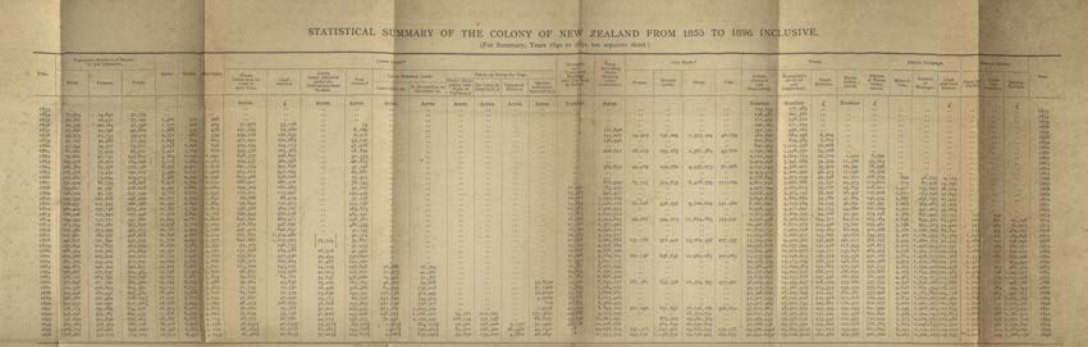
Land in Cultivation.—Acres—in wheat, 5,514; barley, 1,329; oats, 2,324; maize, 259; potatoes, 2,256; grass, 15,589; gardens or orchard, 1,188; other crops, 679; total under crop, 29,140. * Acres fenced, 49,625.

Live Stock.—Horses, 2,890; mules and asses, 60; cattle, 34,787; sheep, 233,043; goats, 12,121; pigs, 16,214.

[The above table is compiled from information given in Dr. Thomson's work on New Zealand, which is stated by Sir George Grey to have been supplied from official sources when he was Governor.]

STATISTICAL SUMMARY OF THE COLONY OF NEW ZEALAND FROM 1855 TO 1896 INCLUSIVE.

(For Summary, Years 1840 to 1854, see separate sheet.)



* The totals in Crown lands are on ground to which title has vested in the Crown, and do not include lands which have been sold and have become alienated. The total gross quantity of land disposed of by Crown grants up to the end of March, 1891, including both lands sold and lands disposed of otherwise than by sale, was 31,611,870 acres; the total quantity of land set apart for roads, reserves, and railways, whether granted or not, was 4,000,000 acres; and the total quantity of land set apart for the purposes of the Native Land Acts, for the Maori race, was 11,000,000 acres. The total quantity of land which has been sold from time to time by the Native race, or acquired by Government, and has not been, or is not intended to be, set apart for the purposes of the Native Land Acts, is 10,611,870 acres, which is the difference between the total quantity of land disposed of by Crown grants up to the end of March of the year following, and the total quantity of land set apart for roads, reserves, and railways, and for the purposes of the Native Land Acts

SUMMARY OF THE RESULTS OF THE CENSUS OF 12th APRIL, 1896.

DISTRIBUTION OF EUROPEAN POPULATION.

—	Total including Chinese and Maori Races.		
	Persons.	Males.	Females.
Counties	591,752	317,483	274,269
Boroughs	367,164	195,417	171,747
Islands adjacent to New Zealand	785	401	384
Chatham Islands	178	100	78
Kermadec Islands	3	2	1
On shipboard	2,481	1,707	774
Totals for colony	962,363	515,110	447,253
North Island	541,691	291,269	250,422
South Island	420,126	223,738	196,388
Stewart Island	163	103	60
Chatham Islands	178	100	78
Kermadec Islands	3	2	1
Totals for colony	962,363	515,110	447,253

Note.—The exact population of the colony and Auckland area is according to the result of a special census taken in February, 1896, amounted to 49,834. Of these, 25,186 persons were found to be in the North Island. A net increase in the Middle Island, 171 in Stewart Island, and 1 in the Kermadec Islands, as compared with the census of 1891, will give the total number of persons enumerated in the European census.

In the tabular portions of the colony (including Maoris in 1891, but not in 1896), 1,114 persons were found absent on the 12th April, 1896; namely, males, 1,000; females, 114.

AGES OF THE PEOPLE (INCLUSIVE OF CHINESE).

Ages	Persons.	Males.	Females.	Proportion per Cent.			Proportion of Males to Females.
				Persons.	Males.	Females.	Males.	Females.
All ages	703,781	377,418	326,363				
Specified ages	701,316	376,092	325,224	100.00	100.00	100.00	51.69	47.31
Under 1 year	15,206	8,104	7,102	2.17	2.16	2.18	51.91	48.09
1 and under 2 years	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
2 years and under 3 years	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
3 " " 4 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
4 " " 5 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
5 " " 6 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
6 " " 7 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
7 " " 8 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
8 " " 9 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
9 " " 10 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
10 " " 11 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
11 " " 12 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
12 " " 13 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
13 " " 14 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
14 " " 15 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
15 " " 16 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
16 " " 17 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
17 " " 18 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
18 " " 19 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
19 " " 20 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
20 " " 21 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
21 " " 22 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
22 " " 23 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
23 " " 24 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
24 " " 25 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
25 " " 26 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
26 " " 27 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
27 " " 28 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
28 " " 29 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
29 " " 30 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
30 " " 31 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
31 " " 32 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
32 " " 33 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
33 " " 34 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
34 " " 35 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
35 " " 36 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
36 " " 37 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
37 " " 38 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
38 " " 39 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
39 " " 40 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
40 " " 41 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
41 " " 42 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
42 " " 43 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
43 " " 44 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
44 " " 45 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
45 " " 46 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
46 " " 47 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
47 " " 48 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
48 " " 49 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
49 " " 50 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
50 " " 51 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
51 " " 52 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
52 " " 53 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
53 " " 54 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
54 " " 55 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
55 " " 56 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
56 " " 57 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
57 " " 58 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
58 " " 59 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
59 " " 60 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
60 " " 61 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
61 " " 62 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
62 " " 63 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
63 " " 64 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
64 " " 65 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
65 " " 66 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
66 " " 67 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
67 " " 68 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
68 " " 69 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
69 " " 70 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
70 " " 71 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
71 " " 72 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
72 " " 73 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
73 " " 74 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
74 " " 75 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
75 " " 76 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
76 " " 77 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
77 " " 78 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
78 " " 79 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
79 " " 80 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
80 " " 81 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
81 " " 82 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
82 " " 83 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
83 " " 84 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
84 " " 85 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
85 " " 86 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
86 " " 87 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
87 " " 88 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
88 " " 89 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
89 " " 90 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
90 " " 91 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
91 " " 92 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
92 " " 93 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
93 " " 94 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
94 " " 95 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
95 " " 96 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
96 " " 97 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
97 " " 98 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
98 " " 99 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
99 " " 100 "	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
100 and upwards	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
Unspecified age under 21	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09
Unspecified age over 21	15,207	8,104	7,103	2.17	2.16	2.18	51.91	48.09

DISTRICTS.

Districts.	Persons.	Males.	Females.	Proportion per Cent.			Proportion of the Sexes.	
				Persons.	Males.	Females.	Males.	Females.
Total population	703,781	377,418	326,363					
Total for specified districts	703,316	376,092	325,224	100.00	100.00	100.00	51.69	47.31
Counties								
Auckland	146,191	78,390	68,301	20.78	20.85	21.00	53.62	46.73
Taranaki	29,252	15,881	13,371	4.16	4.22	4.11	54.29	45.71
Hawke's Bay	31,251	16,811	14,440	4.44	4.47	4.42	53.80	46.20
Wellington	97,197	51,892	45,305	13.81	13.80	13.88	53.39	46.61
Marlborough	7,911	4,284	3,627	1.12	1.14	1.11	54.15	45.85
Nelson	19,183	10,284	8,899	2.73	2.74	2.73	53.61	46.39
Westland	9,191	5,111	4,080	1.31	1.36	1.25	55.61	44.39
Canterbury	97,197	51,892	45,305	13.81	13.80	13.88	53.39	46.61
Otago	97,197	51,892	45,305	13.81	13.80	13.88	53.39	46.61
Southland	34,826	18,652	16,174	4.95	4.96	4.95	53.56	46.44
Total Counties	573,396	305,199	268,197	81.50	81.18	82.17	53.23	46.77
Boroughs								
Auckland	57,795	30,997	26,798	8.21	8.24	8.21	53.64	46.36
Wellington	34,197	18,340	15,857	4.86	4.88	4.86	53.64	46.36
Christchurch	34,197	18,340	15,857	4.86	4.88	4.86	53.64	46.36
Dunedin	34,197	18,340	15,857	4.86	4.88	4.86	53.64	46.36
Total Boroughs	160,386	86,017	74,369	22.79	22.88	22.79	53.63	46.37
Islands								
Chatham Islands	178	100	78	0.03	0.03	0.02	56.18	43.82
Kermadec Islands	3	2	1	0.00	0.00	0.00	66.67	33.33
Total Islands	181	102	79	0.03	0.03	0.02	56.35	43.65
Foreign								
Austria-Hungary	86	74	12	0.01	0.02	0.00	86.05	13.95
Belgium	34	32	2	0.00	0.01	0.00	94.12	5.88
Denmark and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
France and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Germany	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Greece	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Italy	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Netherlands and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Poland	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Portugal and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Russia and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Spain and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Sweden and Dependencies	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Switzerland	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Other European Countries	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Africa	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
African Countries	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
America (Central and Southern)	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
United States of America	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Other Foreign Countries	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Total Foreign	13,180	12,018	1,162	1.91	3.19	0.36	91.18	8.82
At Sea	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Exceptions not stated	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Aliens								
British subjects	1,168	1,064	104	0.17	0.28	0.03	91.10	8.90
Foreign subjects	13,180	12,018	1,162	1.91	3.19	0.36	91.18	8.82

RELIGIOUS DENOMINATIONS.

Religious Denominations.	Persons.
Total population	703,781
Total for specified religions	703,316
Episcopalians	1,168
Church of England, and Denominations not otherwise defined	1,168
Presbyterians	1,168
Wesleyans	1,168
Baptists	1,168
Independents, Bible-class	1,168
Primitive Methodist	1,168
Salvation Army	1,168
Unitarians	1,168
Lutherans	1,168
Brethren	1,168
Society of Friends	1,168
Church of Christ	1,168
Jews	1,168
Followers of Christ	1,168
Mormons	1,168
Roman Catholics	1,168
Agnostics, Freethinkers	1,168
Spiritualists	1,168
Christadelphians	1,168
Theosophists	1,168
Protestants, undefined	1,168
Roman Catholics	1,168
Greek Church	1,168
Other Christian Churches	1,168
Confucians	1,168
Buddhists, Taoists	1,168
Hebrews	1,168
Mohammedans, Labrador Indians	1,168
Fetishists	1,168
Shintoists, Confucians, &c.	1,168
Pagans	1,168
No Denomination	1,168
Secularists	1,168
Others	1,168
Other, Theists	1,168
Objected to state	1,168
Indefinitely returned	1,168
No religion	1,168
Objected to	1,168
Atheists	1,168
Agnostics	1,168
Indefinitely returned	1,168
Object to state	1,168
Not stated	1,168

* Includes United Methodist Free Churches and Bible Christians, which had 1,168 April, 1896.

MARITAL CONDITION OF THE PEOPLE.

Ages	Persons.					Proportion to every 100 living in each Age.				
	Males.			Females.		Males.			Females.	
	Total.	Unmarried.	Married.	Widowers.	Widowed.	Total.	Unmarried.	Married.	Widowers.	Widowed.
All ages	377,418	191,164	175,000	9,148	2,106	100.00	50.65	46.36	2.42	0.56
Specified ages	376,092	191,164	173,674	9,148	2,106	100.00	50.83	46.18	2.43	0.56
14 years and upwards	258,158	120,230	125,000	9,148	2,106	68.65	31.98	33.24	2.43	0.56
Under 14 years	117,934	70,934	—	—	—	31.35	18.85	—	—	—
14 years to 15 years	8,103	8,103	—	—	—	2.15	2.15	—	—	—
15 " 16 "	8,103	8,103	—	—	—	2.15	2.15	—	—	—
16 " 17 "	8,103	8,103	6	—	—	2.15	2.15	0.00	—	—
17 " 18 "	8,103	8,103	24	—	—	2.15	2.15	0.01	—	—
18 " 19 "	8,103	8,103	84	1	—	2.15	2.15	0.02	0.00	—
19 " 20 "	8,103	8,103	168	2	—	2.15	2.15	0.04	0.00	—
20 " 21 "	8,103	8,103	287	3	1	2.15	2.15	0.08	0.00	0.00
21 " 22 "	8,103	8,103	441	5	1	2.15	2.15	0.12	0.00	0.00
22 " 23 "	8,103	8,103	630	7	2	2.15	2.15	0.17	0.00	0.00
23 " 24 "	8,103	8,103	854	9	3	2.15	2.15	0.23	0.00	0.00
24 " 25 "	8,103	8,103	1,113	12	4	2.15	2.15	0.30	0.00	0.00
25 " 26 "	8,103	8,103	1,407	15	5	2.15	2.15	0.38	0.00	0.00
26 " 27 "	8,103	8,103	1,736	19	6	2.15	2.15	0.47	0.00	0.00
27 " 28 "	8,103	8,103	2,100	23	7	2.15	2.15	0.57	0.00	0.00
28 " 29 "	8,103	8,103	2,499	27	8	2.15	2.15	0.68	0.00	0.00
29 " 30 "	8,103	8,103	2,933	32	10	2.15	2.15	0.80	0.00	0.00
30 " 31 "	8,103	8,103	3,402	37	11	2.15	2.15	0.92	0.00	0.00
31 " 32 "	8,103	8,103	3,906	43	13	2.15	2.15	1.06	0.00	0.00
32 " 33 "	8,103	8,103	4,444	49	15	2.15	2.15	1.21	0.00	0.00
33 " 34 "	8,103	8,103	5,017	56	17	2.15	2.15	1.37	0.00	0.00
34 " 35 "	8,103	8,103	5,624	63	19	2.15	2.15	1.53	0.00	0.00
35 " 36 "	8,103	8,103	6,265	70	21	2.15	2.15	1.70	0.00	0.00
36 " 37 "	8,103	8,103	6,940	78	24	2.15	2.15	1.89	0.00	0.00
37 " 38 "	8,103	8,103	7,649	86	26	2.15	2.15	2.08	0.00	0.00
38 " 39 "	8,103	8,103	8,392	94	29	2.15	2.15	2.28	0.00	0.00
39 " 40 "	8,103	8,103	9,169	103	32	2.15	2.15	2.49	0.00	0.00
40 " 41 "	8,103	8,103	9,980	112	35	2.15	2.15	2.71	0.00	0.00
41 " 42 "	8,103	8,103	10,825	122	38	2.15	2.15	2.94	0.00	0.00
42 " 43 "	8,103	8,103	11,704	132	41	2.15	2.15	3.18	0.00	0.00
43 " 44 "	8,103	8,103	12,617	142	44	2.15	2.15	3.43	0.00	0.00
44 " 45 "	8,103	8,103	13,564	153	48	2.15	2.15	3.69	0.00	0.00
45 " 46 "	8,103	8,103	14,545	164	51	2.15	2.15	3.95	0.00	0.00
46 " 47 "	8,103	8,103	15,560	175	55	2.15	2.15	4.23	0.00	0.00
47 " 48 "	8,103	8,103	16,609	187	59	2.15	2.15	4.52	0.00	0.00
48 " 49 "	8,103	8,103	17,692	199	63	2.15	2.15	4.81	0.00	0.00
49 " 50 "	8,103	8,103	18,809	212	67	2.15	2.15	5.12	0.00	0.00
50 " 51 "	8,103	8,103	19,960	225	71	2.15	2.15	5.43	0.00	0.00
51 " 52 "	8,103	8,103	21,145	238	75	2.15	2.15	5.75	0.00	0.00
52 " 53 "	8,103	8,103	22,364	252	80	2.15	2.15	6.08	0.00	0.00
53 " 54 "	8,103	8,103	23,617	266	84	2.15	2.15	6.42	0.00	0.00
54 " 55 "	8,103	8,103	24,904	281	89	2.15	2.15	6.77	0.00	0.00
55 " 56 "	8,103	8,103	26,225	296	93	2.15	2.15	7.13	0.00	0.00
56 " 57 "	8,103	8,103	27,580	311	98	2.15	2.15	7.50	0.00	0.00
57 " 58 "	8,103	8,103	28,969	327	103	2.15	2.15	7.88	0.00	0.00
58 " 59 "	8,103	8,103	30,392	343	108	2.15	2.15	8.26	0.00	0.00
59 " 60 "	8,103	8,103	31,849	359	113	2.15	2.15	8.66	0.00	0.00
60 " 61 "	8,103	8,103	33,340	376	118	2.15	2.15	9.07	0.00	0.00
61 " 62 "	8,103	8,103	34,865	393	123	2.15	2.15	9.48	0.00	0.00
62 " 63 "	8,103	8,103	36,424	411	129	2.15	2.15	9.91	0.00	0.00
63 " 64 "	8,103	8,103	38,017	429	135	2.15	2.15	10.34	0.00	0.00
64 " 65 "	8,103	8,103	39,644	447	141	2.15	2.15	10.78	0.00	0.00
65 " 66 "	8,103	8,103	41,305	466	147	2.15	2.15	11.24	0.00	0.00
66 " 67 "	8,103	8,103	43,000	485	153	2.15	2.15	11.70	0.00	0.00
67 " 68 "	8,103	8,103	44,729	505	159	2.15	2.15	12.17	0.00	0.00
68 " 69 "	8,103	8,103	46,492	525	166	2.15	2.15	12.65	0.00	0.00
69 " 70 "	8,103	8,103	48,289	545	173	2.15	2.15	13.14	0.00	0.00
70 " 71 "	8,103	8,103	50,120	566	180	2.15	2.15	13.64	0.00	0.00
71 " 72 "	8,103	8,103	51,985	587	187	2.15	2.15	14.14	0.00	0.00
72 " 73 "	8,103	8,103	53,884	608	194	2.15	2.15	14.66	0.00	0.00
73 " 74 "	8,103	8,103	55,817	630	201	2.15	2.15	15.19	0.00	0.00
74 " 75 "	8,103	8,103	57,784	652	208	2.15	2.15	15.72	0.00	0.00
75 " 76 "	8,103	8,103	59,785	675	216	2.15	2.15	16.27	0.00	0.00
76 " 77 "	8,103	8,103	61,820	698	224	2.15	2.15	16.82	0.00	0.00
77 " 78 "	8,103	8,103	63,889	721	232	2.15	2.15	17.38	0.00	0.00
78 " 79 "	8,103	8,103	65,992	745	240	2.15	2.15	17.95	0.00	0.00
79 " 80 "	8,103	8,103	68,129	769	248	2.15	2.15	18.53	0.00	0.00
80 " 81 "	8,103	8,103	70,300	793	256	2.15	2.15	19.12	0.00	0.00
81 " 82 "	8,103	8,103	72,505	818	265	2.15	2.15	19.72	0.00	0.00
82 " 83 "	8,103	8,103	74,744	843	274	2.15	2.15	20.33	0.00	0.00
83 " 84 "	8,103	8,103	77,017	869	283	2.15	2.15	20.95	0.00	0.00
84 " 85 "	8,103	8,103	79,324	895	292	2.15	2.15	21.58	0.00	0.00
85 " 86 "	8,103	8,103	81,665	921	301	2.15	2.15	22.22	0.00	0.00
86 " 87 "	8,103	8,103	84,040	948	310	2.15	2.15	22.86	0.00	0.00
87 " 88 "	8,103	8,103	86,449	975	320	2.15	2.15	23.52	0.00	0.00
88 " 89 "	8,103	8,103	88,892	1,003	330	2.15	2.15	24.19	0.00	0.00
89 " 90 "	8,103	8,103	91,369	1,031	340	2.15	2.15	24.86	0.00	0.00
90 " 91 "	8,103	8,103	93,880	1,060	350	2.15	2.15	25.54	0.00	0.00
91 " 92

SUMMARY OF THE RESULTS OF THE CENSUS OF 12th APRIL, 1896.

BIRTHPLACES.

Birthplace	Numbers.			Proportion per Cent.			Proportion of the Sexes in every 1,000 persons
	Persons.	Males.	Females.	Persons.	Males.	Females.	Males.	Females.
Total population	3,029,478	1,521,643	1,507,835	...	...	...	502·28	497·72
Totals for specified birthplaces	2,998,738	1,505,208	1,493,530	100·00	100·00	100·00	501·95	498·05
Britain:—								
United Kingdom—								
England	2,178,541	1,086,390	1,092,151	72·64	72·16	73·12	498·65	501·35
Wales	9,748	4,890	4,858	·32	·32	·33	501·64	498·36
Scotland	46,141	23,355	22,786	1·54	1·55	1·53	506·17	493·83
Ireland	38,252	19,253	18,999	1·28	1·28	1·27	503·32	496·68
Total United Kingdom ...	2,272,682	1,133,888	1,138,794	75·78	75·31	76·25	498·92	501·08
Australasia—								
New Zealand	142,881	72,264	70,617	4·76	4·80	4·73	505·75	494·25
Australasia, Fiji	61,861	31,219	30,642	2·06	2·07	2·05	504·66	495·34
Total Australasia	204,742	103,483	101,259	6·82	6·87	6·78	505·43	494·57
Other British possessions ...	3,230	2,201	1,029	·11	·15	·07	681·73	318·27
Total Britain	2,480,654	1,239,572	1,241,082	82·71	82·33	83·10	499·70	500·30
Foreign:—								
Austria-Hungary	881	747	134	·03	·05	·01	847·90	152·10
Germany	6,633	5,153	1,480	·22	·34	·10	776·94	223·06
Russia and Finland	6,413	5,213	1,200	·21	·35	·08	812·94	187·06
France and Possessions	1,141	1,041	100	·04	·07	·01	912·36	87·64
Greece	2,187	2,187	0	·07	·15	·00	1,000·00	·00
Italy	1,197	1,197	0	·04	·08	·00	1,000·00	·00
Netherlands and Possessions ...	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Spain and Possessions	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Switzerland and Possessions ...	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Sweden and Possessions	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Norway and Possessions	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Other European Countries	3,282	2,282	1,000	·11	·15	·07	695·31	304·69
Asiatic and Islands	3,282	2,282	1,000	·11	·15	·07	695·31	304·69
African Countries	1,141	1,141	0	·04	·08	·00	1,000·00	·00
American (North America)	3,282	2,282	1,000	·11	·15	·07	695·31	304·69
United States of America	3,282	2,282	1,000	·11	·15	·07	695·31	304·69
Other Foreign Countries	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Total Foreign	43,084	33,636	9,448	1·44	2·23	·63	780·70	219·30
At Sea	1,222	747	475	·04	·05	·03	611·29	388·71
Birthplaces not stated	4,778	3,288	1,490	·16	·22	·10	688·36	311·64
Elsewhere:—								
British subjects	194,205	104,238	89,967	6·47	6·92	5·97	536·77	463·23
Foreign subjects	74,397	41,179	33,218	2·48	2·73	2·20	553·57	446·43

AGES OF THE PEOPLE (EXCLUSIVE OF CHINESE).

Ages.	Persons.	Proportion per Cent.		Proportion of Sexes in every 1,000 Persons.		
		Males.	Females.	Persons.	Males.	Females.
All ages	3,029,478	50·22	49·78	1,000·00	1,000·00	1,000·00
Specified ages	3,001,516	50·23	49·77	1,000·00	1,000·00	1,000·00
Specified ages above 3 years ...	2,870,038	50·23	49·77	1,000·00	1,000·00	1,000·00
Under 3 years	131,478	50·20	49·80	43·78	43·72	43·83
3 years to 10 years	483,800	50·20	49·80	161·11	160·94	161·28
10 " 15 "	244,178	50·21	49·79	81·32	81·27	81·37
15 " 20 "	233,360	50·21	49·79	77·72	77·68	77·76
20 " 25 "	252,862	50·21	49·79	84·19	84·15	84·23
25 " 30 "	272,892	50·21	49·79	90·86	90·82	90·90
30 " 35 "	257,476	50·21	49·79	85·73	85·70	85·77
35 " 40 "	241,206	50·21	49·79	80·32	80·29	80·35
40 " 45 "	211,168	50·21	49·79	70·31	70·28	70·34
45 " 50 "	183,161	50·21	49·79	60·98	60·96	61·00
50 " 55 "	144,405	50·21	49·79	48·08	48·07	48·09
55 " 60 "	120,744	50·21	49·79	40·20	40·19	40·21
60 " 65 "	94,772	50·21	49·79	31·55	31·54	31·56
65 " 70 "	69,112	50·21	49·79	23·01	23·00	23·02
70 " 75 "	43,977	50·21	49·79	14·64	14·64	14·64
75 " 80 "	23,772	50·21	49·79	7·91	7·92	7·91
80 " 85 "	10,000	50·21	49·79	3·33	3·33	3·33
85 " 90 "	3,000	50·21	49·79	1·00	1·00	1·00
90 " 95 "	1,000	50·21	49·79	·33	·33	·33
95 " 100 "	300	50·21	49·79	·10	·10	·10
100 " 105 "	100	50·21	49·79	·03	·03	·03
105 " 110 "	30	50·21	49·79	·01	·01	·01
110 " 115 "	10	50·21	49·79	·00	·00	·00
115 " 120 "	3	50·21	49·79	·00	·00	·00
Unspecified ages	28,962	50·21	49·79	9·65	9·70	9·60

RELIGIOUS DENOMINATIONS.

Religious Denominations.	Numbers.			Proportion per Cent.			Proportion of the Sexes in every 1,000 persons.	
	Persons.	Males.	Females.	Persons.	Males.	Females.	Males.	Females.
Total population	3,029,478	1,521,643	1,507,835	...	...	...	502·28	497·72
Total for specified religions ...	2,998,738	1,505,208	1,493,530	100·00	100·00	100·00	501·95	498·05
Episcopalians	1,161,168	548,112	613,056	38·73	36·41	41·05	472·00	528·00
Church of England and Protestant Episcopal	1,161,168	548,112	613,056	38·73	36·41	41·05	472·00	528·00
Presbyterians	720,661	351,637	368,924	24·03	23·35	24·70	487·96	512·04
Methodists	453,313	211,161	242,152	15·12	14·03	16·21	465·85	534·15
Wesleyan Methodist ...	453,313	211,161	242,152	15·12	14·03	16·21	465·85	534·15
Primitive Methodist ...	3,893	1,961	1,932	·13	·13	·13	503·72	496·28
Methodists, undefined ...	2,893	1,461	1,432	·10	·10	·09	505·01	494·99
Baptists	31,411	15,488	15,923	1·05	1·03	1·07	493·08	506·92
Congregationalists	58,911	29,455	29,456	1·96	1·96	1·97	500·00	500·00
Lutherans, German Evangelical ...	3,893	1,961	1,932	·13	·13	·13	503·72	496·28
Unitarians	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Christian Friends	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Church of Christ	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Disciples	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Salvation Army	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Evangelists	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Apostolic Church	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Salvation Army	34,511	17,255	17,256	1·15	1·15	1·14	500·01	499·99
Other Christians	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Seventh-day Adventists	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Christians, undefined	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Christadelphians	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Protestants, undefined	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Jews	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Roman Catholics	344,149	172,074	172,075	11·48	11·43	11·52	500·00	500·00
Brethren, Latter-day Saints ...	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Spiritualists	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Miscellaneous, Undefined, &c. ...	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Agnostics	1,141	1,141	0	·04	·08	·00	1,000·00	·00
No Denomination—								
Freethinkers	3,282	2,282	1,000	·11	·15	·07	695·31	304·69
Agnostics	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Atheists	1,141	1,141	0	·04	·08	·00	1,000·00	·00
No Denomination	1,141	1,141	0	·04	·08	·00	1,000·00	·00
No religion	1,141	1,141	0	·04	·08	·00	1,000·00	·00
No religion	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Secularists	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Undefined	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Religious Denominations undefined ...	1,141	1,141	0	·04	·08	·00	1,000·00	·00
Unspecified	1,141	1,141	0	·04	·08	·00	1,000·00	·00

* Includes United Methodist Free Churches and Bible Christians, which bodies were incorporated in the Wesleyan Methodist Church on 13th April, 1896.

EDUCATION OF THE PEOPLE (EXCLUSIVE OF CHINESE).

Ages.	Numbers (excluding Chinese).								Proportion per cent (per 1,000 persons) Age-period.							
	Persons.				Males.				Females.				Persons.		Males.		Females.	
	Read and Write.	Read Only.	Cannot Read.	Education Unknown.	Read and Write.	Read Only.	Cannot Read.	Education Unknown.	Read and Write.	Read Only.	Cannot Read.	Education Unknown.	Read and Write.	Cannot Read.	Read and Write.	Cannot Read.	Read and Write.	Cannot Read.
All ages	2,981,737	7,741	39,997	1,003	1,496,126	3,878	20,633	1,006	1,485,611	3,863	19,364	[illegible]	984·19	1·32	983·68	1·32	984·70	1·30
Specified ages	2,962,775	7,741	30,000	1,003	1,486,126	3,878	20,633	1,006	1,476,649	3,863	19,364	[illegible]	986·99	1·01	986·32	1·01	987·66	1·00
Specified ages above 3 years ...	2,831,297	7,741	30,000	1,003	1,416,126	3,878	20,633	1,006	1,415,171	3,863	19,364	[illegible]	987·44	1·04	986·77	1·04	988·11	1·03
Under 3 years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3 years to 10 years	131,478	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10 " 15 "	483,800	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15 " 20 "	244,178	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20 " 25 "	233,360	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25 " 30 "	252,862	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30 " 35 "	272,892	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
35 " 40 "	257,476	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
40 " 45 "	241,206	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
45 " 50 "	211,168	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50 " 55 "	183,161	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
55 " 60 "	144,405	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
60 " 65 "	120,744	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
65 " 70 "	94,772	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
70 " 75 "	69,112	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
75 " 80 "	43,977	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
80 and upwards	33,772	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unspecified age under 10 ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unspecified age over 10 ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OCCUPATIONS.

Occupations (Trade and Others).	Numbers.			Proportion per Cent.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Total population	3,029,478	1,521,643	1,507,835	1,000·00	1,000·00	1,000·00
Professional—						
Persons employed in Government pay otherwise classed), Admiralty, War, and Civil Departments	3,282	3,208	74	1·08	2·11	·05
Persons employed in religion, charity, health, science, education, and the arts	74,661	31,248	43,413	24·65	20·54	28·79
Persons engaged in the supply of board and lodging, and in conducting processes for the use of which fuel is required	18,810	3,880	14,930	6·21	2·55	9·90
Commercial—						
Persons performing offices in connection with the exchange, valuation, investing, loan, sale, or custody of money, houses, land, or property	2,282	1,141	1,141	·75	·07	·08
Persons employed in the buying, selling, and dealing in goods, wares, or merchandise (excepting those for which materials of various kinds are required in connection with them, as in dressmaking, &c.)	6,282	4,141	2,141	2·07	2·72	1·42
Persons employed in conveying by road, drawing, harbouring, and attendance	5,282	5,208	74	1·74	3·42	·05
Persons employed in conveying by railway, and driving locomotives and engines for stationary purposes (including firemen in both)	2,282	2,141	141	·75	1·41	·09
Persons employed in conveying by navigation and other employment about the hull and fittings	1,141	1,074	67	·38	·71	·04
Persons employed in clerking in connection with the manufacture of, or in other processes connected with, the following articles, or in which materials of various kinds are employed in common	3,282	2,141	1,141	1·08	1·41	·76
Persons employed in connection with the manufacture of, or in repairing, assembling, or in other processes relating to, textile fabrics, dress and dressed articles	12,661	3,141	9,520	4·18	2·06	6·31
Persons employed in connection with the manufacture of, or in other processes relating to, food, drink, narcotics, and stimulants	5,282	3,208	74	1·74	2·11	·05
Persons employed in connection with the manufacture of other products not enumerated	2,282	2,208	74	·75	1·45	·05
Persons employed in connection with the manufacture of, or in repairing, vehicles, ships, and boats	4,282	4,208	74	1·41	2·76	·05
Persons employed in connection with the manufacture of, or in repairing, articles of which wood is the principal material	12,661	12,141	520	4·18	7·98	·34
Persons employed in connection with the manufacture of, or in working, metals, machines, implements, and conveyances	28,130	28,008	2,122	9·29	18·41	1·41
Persons employed in connection with the manufacture of, or in working, bricks, cements, pottery, and glass	2,282	2,141	141	·75	1·41	·09
Persons employed in connection with the manufacture of, or in working, articles of which paper, leather, gutta-percha, india-rubber, or canvas is the principal material	3,282	2,141	1,141	1·08	1·41	·76
Persons employed in connection with the manufacture of, or in working, articles of which bone, horn, ivory, hair, feathers, or shells is the principal material	1,141	1,141	0	·38	·75	·00
Persons employed in connection with the manufacture of, or in working, articles of which chemicals, oils, grease, or resin is the principal material	1,141	1,141	0	·38	·75	·00
Persons employed in connection with the manufacture of, or in working, articles of which mixed materials are principally employed	1,141	1,141	0	·38	·75	·00
Persons employed in connection with the manufacture of, or in working, articles of which the principal material is not specified or known ... ...

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